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NAVAL WAR COLLEGE REVIEW

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Cover

An etching by James Gillray (1756–1815), considered the leading British caricaturist of the late eighteenth century: “Immortality—the Death of Admiral Lord Nelson—in the moment of Victory!—this Design for the Memorial intended by the City of London . . . humbly submitted to the . . . Lord Mayor.” It appeared on 23 December 1805, the day the body of Nelson, killed on 21 October at Trafalgar, was transferred from his flagship, HMS Victory, on its way to the Royal Naval Hospital, Greenwich, where it would lie in state. The veneration for the admiral evident even in this somewhat tongue-in-cheek image, and still strong in the United Kingdom today at the bicentennial of his death, has not been afforded by Americans to any of their own great naval leaders—for reasons, and with implications, explored in our lead article by James Holmes.

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MASTERFUL EXISTENCE—GRACEFUL ELOQUENCE

This eulogy was delivered at the memorial service for Vice Admiral James Stockdale in the U.S. Naval Academy Chapel, in Annapolis, Maryland, on 23 July 2005.

Ladies and gentlemen, distinguished guests—Sybil and the sons of Vice Admiral James B. Stockdale—again, thank you for this trust.

Permit me to speak in the name of God: creator, redeemer, and comforter. Moreover, for just a moment allow me to hold a lantern above our loss. We have gathered to celebrate the life of a great man in a chapel he was no stranger to and a man whose journey of faith never stopped moving.

Admiral James Bond Stockdale knew this as a place that directs us to One greater than ourselves, to one Who reveals himself through the sacred text, and to one Who requires much. He understood the classroom forms the thoughts of man while the sanctuary of faith forms the soul of man, both being essential for the formation of character so one can persevere under any circumstance.

Writing to Timothy, a young and struggling Christian leader in the infant church, the Apostle Paul wrote:

In a large house there are articles not only of gold and silver, but also of wood and clay; some are for noble purposes and some for ignoble. If a man cleanses himself from the latter, he will be an instrument for noble purposes, made holy, useful to the Master and prepared to do any good work.

When we survey the landscape of history, looking at the epics of time we recognize that God, in his wisdom, graces the stage of humankind with a servant given to living the noble life. I can only surmise God's intent is to provoke our conscience and call forth from his creation a meaningful manner of living life in this gymnasium of existence.

The elder sage, Solomon, wrote poignantly about those seeking to convey truths with just the right words. He said, "The words of the wise prod us to live well. They're like nails hammered home, holding life together." I would submit to you, this is indicative of the life of Vice Admiral Stockdale. His is a life of masterful existence and graceful eloquence.

However we knew him, we knew him to be a man of words. Whether tapped on a wall, written, or spoken, his words confront you. They agitate the mind, they stir the soul, they disturb our complacency. They also, however, call forth the best in us, instructing us to live a life worthy of our calling. Just as a pebble dropped into a pool of still water sends out ripples, likewise his collection of thoughts extend their influence into many realms.

Yet, his wisdom, born of academic rigor and forged in the hermetic, is for anyone to peer into and learn from—it is, however, a choice. God does not mandate we learn from the sages, though at our own peril we disregard their prophetic voice of wisdom. Yet, the invitation is: “he who has ears, let him hear.”

I have asked myself on many occasions if there is one central lesson from the Admiral. What is it that his life “speaks of”? What is a common thread running through his speeches, writings, and discussions? In prison, was it unity over self? After Vietnam, was it his passion for education? Was it his desire to cultivate officers to become moral leaders? On the other hand, did he want to agitate the minds of leaders to confront their own moral foundations so they might determine whether they had built on sand or rock? Whatever it is for each of us, I believe his life echoed the words of two men: Marcus Aurelius, who mused, “What can guide us through this life? Philosophy, only philosophy,” and then that of the biblical writer James, who wrote: “I will show you my faith—by what I do.”

I consider myself a most fortunate man to have been invited into the winter of his life. Though we shared a common conviction that “holding the moral high ground is more important than firepower,” my first lesson contained no such discussion. At the invitation of Sybil and the Admiral, I joined them for their customary Sunday evening meal, which was more of a “meeting of the minds.” As we gathered around the table, the printed lesson was placed in my hands. I wondered what great philosophical or theological concept we might discuss. The topic that evening? Death. Later that night, while I was on my way home, I reflected on what he had taught. Though it is a simple lesson, the ramifications are considerable, that being, the certainty of death teaches us to live life with purpose and intent—as God has given.

Ladies and gentlemen, his is a life of masterful existence and graceful eloquence. He understood one does not worry about establishing a legacy, but one must be concerned about the life lived. Therefore, let us listen to God’s servant, for “though he is dead, yet still he speaks.”

COMMANDER STEVEN L. SMITH, CHC, USN

Commander Smith is Command Chaplain, USS Ronald Reagan (CVN 76).





Rear Admiral Jacob L. Shuford was commissioned in 1974 from the Naval Reserve Officer Training Corps program at the University of South Carolina. His initial assignment was to USS Blakely (FF 1072). In 1979, following a tour as Operations and Plans Officer for Commander, Naval Forces Korea, he was selected as an Olmsted Scholar and studied two years in France at the Paris Institute of Political Science. He also holds master's degrees in public administration (finance) from Harvard and in national security studies and strategy from the Naval War College, where he graduated with highest distinction.

After completing department head tours in USS Deyo (DD 989) and in USS Mahan (DDG 42), he commanded USS Aries (PHM 5). His first tour in Washington included assignments to the staff of the Chief of Naval Operations and to the Office of the Secretary of the Navy, as speechwriter, special assistant, and personal aide to the Secretary.

Rear Admiral Shuford returned to sea in 1992 to command USS Rodney M. Davis (FFG 60). He assumed command of USS Gettysburg (CG 64) in January 1998, deploying ten months later to Fifth and Sixth Fleet operating areas as Air Warfare Commander (AWC) for the USS Enterprise Strike Group. The ship was awarded the Battle Efficiency "E" for Cruiser Destroyer Group 12.

Returning to the Pentagon and the Navy Staff, he directed the Surface Combatant Force Level Study. Following this task, he was assigned to the Plans and Policy Division as chief of staff of the Navy's Roles and Missions Organization. He finished his most recent Pentagon tour as a division chief in J8—the Force Structure, Resources and Assessments Directorate of the Joint Staff—primarily in the theater air and missile defense mission areas. His most recent Washington assignment was to the Office of Legislative Affairs as Director of Senate Liaison.

In October 2001 he assumed duties as Assistant Commander, Navy Personnel Command for Distribution. Rear Admiral Shuford assumed command of Cruiser Destroyer Group 3 in August 2003. He became the fifty-first President of the Naval War College on 12 August 2004.

PRESIDENT'S FORUM



Shaping the Future

I believe in the power of our past to inspire and instruct. We are the inheritors of a proud legacy. We must capture those lessons, study them and apply them to current operations where applicable. While we certainly learn from the past, we cannot—and should not—try to live in it.

ADMIRAL MIKE MULLEN, USN, CHIEF OF NAVAL OPERATIONS

TODAY, OUR LEADERS ARE COMING TO GRIPS with the implications of a strategic environment, unique in our history, for military tasks and mission areas. As we define and understand with increasing clarity what must be done and how to do it, the importance of *shaping* the global environment has emerged as a linchpin of our strategic ways and means. Shaping refers to the wide range of activities—diplomatic, informational, military, and economic—that encourage global, regional, and local developments favorable to democracy, civil liberties, and prosperity and unfavorable to the policies of aggressive nations and to the formation and operations of violent groups, especially groups employing terrorism.

Though the geostrategic environment is different, the military instrument of national power most effective for shaping that environment to better protect the United States and advance its interests is, to a significant degree, already in place. History has demonstrated repeatedly the value of the unique set of capabilities that naval forces bring to our nation and the world—credible combat-capable forces that are agile and mobile, can persist *on scene*, and are adaptive (expeditionary), scalable to the task, and unintrusive. These are precisely the traditional characteristics of U.S. naval forces, and they respond directly to the demands of the shaping mission. This was the conclusion reached at the Naval War College's most recent Current Strategy Forum, where three days were devoted to the intense examination of shaping: what it is, how it works, and what capabilities it requires.

What emerged was a consensus that, above all, effective shaping requires two fundamental attributes of naval forces: the ability to provide sustained presence in areas where our interests need tending, and to do so while being minimally intrusive or provocative. A globally distributed, forward-postured, combat-capable Navy, closely cooperating with international partners and commanded and controlled through a Joint Force Maritime Combatant Commander (JFMCC), offers immediately available, sustainable, and flexible forces for the Joint Force Commander to better understand and influence—to *shape*—the security environment of his region, especially to counter terrorist threats. These JFMCCs, linked into a global network, begin to operationalize a key strategic objective—global maritime domain awareness. Maritime domain awareness, in turn, enables a more coordinated and proactive approach to the nation’s homeland-defense mission.

Never have the Navy and Marine Corps arguments for the value of on-scene naval forces been more strategically compelling: afloat forces persistently available to the joint commander to coalesce and transition to major conflict operations, routinely and pervasively present with a wide range of capabilities to counter terror and terrorist development and to defend in depth against threats to the homeland. These same forces derive additional strategic value by dissuading and deterring potential adversaries while assuring our friends and allies. Moreover, forward-postured naval forces are uniquely suited to coalition building and to creating persistent, reliable, helpful partnerships with friends and allies in the theater.

In the twenty-first century, the Naval War College is orienting professional military education to support the Navy’s ability to influence the maritime and global security environment. Shaping operations can involve U.S. military forces deployed either from the United States or from operating locations overseas. They can be conducted in international waters and airspace or on or over the territory of other countries. In an era where fourth-generation warfare* is a reality of the international environment, such operations require an unprecedented degree of confidence about what is taking place on, above, or below the sea—a state of knowledge and understanding known as “maritime domain awareness.” Here too the Naval War College is focusing its education and substantial research, analysis, and gaming capabilities to ensure that the Navy has the kind of maritime domain awareness necessary not only in the traditional hot

* “Fourth-generation warfare,” a concept defined in 1989 by William S. Lind and a group of U.S. Army and Marine Corps officers, and expanded by Thomas X. Hammes, is commonly used to describe the decentralized nature of modern warfare. It refers to warfare, likely to last for decades, in which one of the major participants is not a state but a network espousing a violent ideology. Fourth-generation warfare blurs the traditional distinctions between war and politics, soldiers and civilians, peace and conflict, and battlefields and safe rear areas.

phases of war but also in precursor and postconflict phases—often referred to, respectively, as “Phase Zero” and “Phase Four” of a campaign.

On the educational front, Phase Zero effects take place first and foremost at an individual, person-to-person level. Since its inception in 1884, the Naval War College has played a continuing role in promoting international understanding, partnership, and cooperation in the maritime domain, although international officers were originally present as resident students to a very limited degree. This changed in 1956, thanks to the vision of Admiral Arleigh Burke. Based on his wartime and postwar experiences with allies, and faced with the immediate threats of the Cold War, Burke concluded that it was vitally important for us to understand our allies and for them to understand us. In 1956, he used his influence as CNO to create a Naval War College program for international officers aimed at developing a group of international naval officers with common knowledge, experiences, and goals. Burke hoped that officers brought together from diverse countries to study war and to get to know each other on a professional and personal basis would be able to establish genuine trust and confidence among themselves, to prevent conflict and advance shared ideals more effectively in the future. If war did come, they would be better prepared to plan, fight, and win decisive victories together. He called this program the Naval Command Course (later renamed the Naval Command College, or NCC).

A total of 1,554 students have graduated from the NCC since its first class ended in 1957. (Another 1,520 have graduated from a similar program for intermediate-level international officers, known as the Naval Staff College.) Over the years, alumni have come from 122 different countries. More than one-third of these officers go on to flag rank. And over 230 have gone on to become heads of their navies, with thirty-seven serving in that capacity at this moment. This includes the current Chiefs of Naval Staff of India, Japan, and Pakistan, who graduated together in the Class of 1990. The distinguished alumni from these international programs include heads of state, cabinet members, ambassadors, and successful business leaders. Among the exemplary U.S. alumni who studied alongside these officers is General M. W. Hagee, the current Commandant of the Marine Corps, who has said: “I can think of several occasions when I was in a bind in Italy, France, Singapore and Malaysia when I called on my NCC classmates and they were there to help me out.” These types of relationships are as essential to Phase Zero operations as they are in wartime. Their development cannot be left to the moment of a serious crisis, when time is short and the atmosphere of trust has yet to be established.

That trust and confidence necessary for cooperation grow well in the professional environment of the Naval War College. In addition to personal relationships with classmates, the College serves as the intellectual source for and host of

numerous critical international meetings and war games. In 1962, after the CNO hosted a meeting of chiefs of hemispheric navies, the Naval War College began a series of meetings among the same countries' war college presidents, called the Conference of the Naval War Colleges of the Americas (CNWCA). CNWCA occurs every two years and features a combined war game; this year it focuses on the new threats presented by terrorist activities. In October 2004, at the most recent CNWCA, Argentina took the lead in developing and executing a war game dealing with terrorism. In the fall of 2005 this game will be played by each navy (via networked computers) from their respective war colleges. All participants will then meet in Mexico to analyze results and discuss conclusions.

The Naval War College hosts the International Seapower Symposium (ISS) every other year. At this meeting of navy chiefs from around the world, our CNO sponsors a robust program of presentations, briefs, plenary sessions, and discussions on a theme chosen to foster trust, understanding, and cooperation. This year, ISS will focus on the actions necessary to create a global network of nations working together for a free and secure maritime commons. With an objective of improving maritime domain awareness, the ISS will lay the groundwork for gathering and sharing information from the global maritime environment through regional, voluntary participation by states interested in joining this network. ISS is an ideal forum for initiating this type of activity, generating global benefits for partner nations from discrete national and regional capabilities. Since 1996 Italy has hosted four regional seapower symposiums for the navies of the Mediterranean and Black Sea area. A similar symposium, known as the Western Pacific Naval Symposium (WPNS), has been held in the Asia-Pacific region since 1988, and there has been discussion of starting a third regional symposium for the Middle East navies. Our new CNO, Admiral Mike Mullen, kicks off ISS XVII here on 21 September.

Finally, the College has made significant progress in enhancing college-to-college bilateral relationships. We are investigating expanding the exchange of faculty, courses, and ways of sharing information and programs with naval war colleges in Japan, Chile, the Russian Federation, India, Argentina, and Mexico. This type of institutional relationship will build on the personal interactions that take place with international students here in Newport and on the regular meetings and events, like ISS and war games, to provide a framework for robust and routine cooperation that in turn enables effective operational coordination among participating nations.

In addition to the education of foreign officers and regular meetings such as ISS, the Naval War College's International Law Department works on international law and rules of engagement (ROE) issues that affect U.S. military policy, strategy, and operations, as well as those of our allies and partners. Nothing

shapes the maritime environment as much as the law—whether it is in peacetime or war. The department conducts research, teaches, participates in war games, publishes, and holds conferences. In addition to providing legal instruction to resident U.S. and international students, our law faculty conducts seminars at military institutions in Argentina, Canada, Chile, Germany, and Japan. The Stockton Chair, annually filled by a distinguished visiting international legal expert, maintains the College's visibility and prestige by participating in international colloquia and meetings to develop consensus on key issues in the law of armed conflict. We also conduct an annual international law conference that attracts military and civilian academics and practitioners from around the world. The papers and discussions are published in the College's International Law Studies ("Blue Book") series, which are distributed to an international audience and are found in the best international law libraries around the world.

The Naval War College continues to build on its ability to support the Navy's shaping function through bilateral and multilateral war games. Some of this gaming activity is of long standing, such as the annual U.S.-Japan NORTHWESTPAC game. The game has been occurring for many years, but the topics have evolved to match the changing strategic landscape and the enhanced U.S.-Japan alliance. More recently, the College has planned and hosted multinational games that directly address the Phase Zero types of operations necessary in the post-9/11 world. In September 2004, under the sponsorship of the Office of the Secretary of Defense, high-level delegations from seventeen countries played in a weeklong game designed to test and explore maritime interdictions of components of weapons of mass destruction, as part of President Bush's Proliferation Security Initiative. Through this and other games, the Naval War College is bringing the logic and rigor of military planning to the interagency processes of many nations. In return, the College gathers lessons and feeds them back to the Navy to help define requirements, objectives, and mechanisms for improving maritime domain awareness.

In the new security arena and in the joint environment, Joint Force Commanders will require Joint Force Maritime Component Commanders to lead and support operations spanning the full spectrum of warfare. Working closely with our fleet commanders, the Naval War College is using its education, research, analysis, and war-gaming resources to evolve its Joint Command Center, routinely used as the command-and-control hub for a wide range of activities at the College, into a JFMCC Center. This center will build on the knowledge gained during our participation in support of joint fleet exercises and during the JFMCC Flag Officer course of instruction. This course brings together prominent senior joint warfighters and government agency leaders as Distinguished Fellows to augment the College's core faculty. The first such course, for a dozen

of our nation's most promising general and flag officers, began this August. Our plan is to build this JFMCC capability into the coalition world as well, holding a Combined Force Maritime Component Commander's (CFMCC) course, with a regional focus, in 2006. I will report more on the first course and the way ahead on this initiative in the next issue of the *Review*.

To return to our opening thoughts about the value of history as it relates to our nation's and our Navy's strategic and operational challenges, we find many lessons from the past about both the utility of maritime forces and the importance of maintaining close ties with friends and allies around the world. I assure you that the College is dedicated to being at the forefront on these vital issues, both here on our Newport campus and as we reach out to our forward-deployed forces and to our friends, colleagues, and alumni around the world.

A handwritten signature in black ink, appearing to read "J. L. Shuford". The signature is fluid and cursive, with a large initial "J" and a stylized "S".

J. L. SHUFORD

Rear Admiral, U.S. Navy
President, Naval War College

James R. Holmes is a senior research associate at the Center for International Trade and Security, University of Georgia School of Public and International Affairs; editor of the Center's journal, The Monitor; and instructor in the university's honors program. He earned a doctorate in international relations from the Fletcher School of Law and Diplomacy, Tufts University, and is the author of the forthcoming Theodore Roosevelt and World Order: Police Power in International Relations, as well as numerous articles and shorter works.

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WHY DOESN'T AMERICA HAVE A NELSON?

Does It Need One?

by James Holmes

Two thousand five marks the bicentennial of the Battle of Trafalgar. Off the southern Atlantic coast of Spain, at Cabo (Cape) Trafalgar, a British fleet commanded by Lord Horatio Nelson crushed a larger Franco-Spanish fleet. The encounter answered one of the central questions of the Napoleonic Wars—would Napoleon's legions be able to invade the British Isles?—with a resounding No.¹ The British media today are abuzz with talk of Nelson's exploits. The Royal Navy planned a full slate of events to honor the man the poet Lord George Byron dubbed "Britannia's god of war."² Towns and seaports have scheduled their own tributes. All evidence points to a surge of public enthusiasm for Horatio Nelson in particular, and for Great Britain's maritime traditions in general.³ Naval history, in short, continues to shape public discourse.

Not so in America. Why? Like Great Britain, the United States is a maritime nation. Like Britain, the Republic has—from the day of John Paul Jones forward—owed much of its prosperity and security to the sea. America's history is replete with heroic figures and feats of derring-do, from the single-ship actions of the War of 1812 to the epic struggle with the Japanese navy at Leyte Gulf.⁴ Yet in stark contrast to the hubbub surrounding Britain's Trafalgar bicentenary, great naval endeavors are noticeably absent from our national discourse. At this writing the sixtieth anniversary of the Battle of Iwo Jima, one of the pivotal clashes of the Pacific War, has passed with scarcely a murmur from the media or the public. For the good of the U.S. Navy and the nation, American sailors, veterans, and naval historians need to put this kind of oversight to rights.⁵

BRITONS PAY TRIBUTE TO THE GREAT MAN

Why the disparity between such kindred societies? Despite the gap of two centuries and thousands of miles of ocean, it is possible to venture some informed speculation. First, as Byron and a legion of other admirers would attest, Horatio Nelson was a unique man. Granted, other naval heroes were his equal in certain respects. For example, Lord Collingwood showed that he was as skilled in combat when he took over from Nelson after Nelson was mortally wounded at Trafalgar and ably commanded the fleet, consummating the victory.⁶ Some historians would rate Collingwood as Nelson's equal as a warrior and seaman.⁷ Others possessed his force of character. Thomas Cochrane, one of the most accomplished frigate commanders of Nelson's day and "the master of small ship tactics and the *ruse de guerre*," served as the model for both Patrick O'Brian's Jack Aubrey and C. S. Forester's Horatio Hornblower—ample testament to his larger-than-life character.⁸ However, none could match Nelson in all of these respects.

Lord Nelson's boldness, strategic and tactical acumen, and sheer bravado endeared him to Britons, as did his high-profile triumphs at the Battle of Santa Cruz de Tenerife, Corsica (1796); the Battle of Cape St. Vincent (1797); the Battle of the Nile (1798); and, of course, Trafalgar (1805). At Trafalgar, rather than have his ships form up parallel with Napoleon's fleet and pound away—the usual mode of nautical combat in the Age of Sail—Nelson divided his fleet into two squadrons and ordered his captains to cut across the Franco-Spanish battle line, creating a melee that favored British gunners. He admonished his officers to close with and annihilate (one of his favorite words) the Franco-Spanish fleet.⁹ "No captain can do very wrong who lays his ship alongside that of the enemy," he proclaimed.¹⁰ Nelson exploited the edge in command and control conferred by the Royal Navy's freshly devised system of signal flags.¹¹ That he fell at Trafalgar only served to etch Nelson's greatest deed into the British public mind—much as Abraham Lincoln's death at his moment of greatest triumph made him a fixture atop many rankings of American presidents.¹²

In recent decades it has become fashionable to downplay the impact of individuals on history. Great, impersonal forces, we are told, carry us along to their own mysterious ends, indifferent to our efforts to influence events. Maybe, but great men still command the admiration of their countrymen.

Nelson's like is not to be found in American naval history. The momentary brilliance of Commodore Stephen Decatur braving the pasha of Tripoli's guns to burn the captured U.S. frigate *Philadelphia* (1804), of Admiral David Farragut forcing Mobile Bay (1864) despite "the torpedoes," or of Commodore George Dewey demolishing the Spanish flotilla at Manila Bay (1898) cannot measure up to the repeated victories of a Nelson. Nor does the sustained excellence of the U.S. Navy's World War II elite measure up.¹³ Admiral Chester Nimitz oversaw

the Pacific War from Pearl Harbor, and so was denied the laurels due a fighting admiral. The Japanese navy made a sucker of Admiral William Halsey at Leyte Gulf, luring him off with an unarmed fleet. The cerebral Admiral Raymond Spruance lacked the dash of a Nelson, and Admiral Arleigh Burke, perhaps the U.S. Navy's best candidate for the eminence of a Nelson, made his reputation not by masterminding an epic, Trafalgar-like fleet engagement, but as a destroyer squadron (23) commander—too obscure a post to inspire lasting public ardor.¹⁴

The U.S. Navy has yet to produce a commander who can equal Nelson's combination of war-fighting excellence, personal gallantry, and public prominence. Whether the Navy can do so today, absent a powerful rival on the high seas, is doubtful at best.

MORTAL THREATS CONCENTRATE MINDS

Great Britain's national survival was at stake, and the sea was where its fate would be decided. Gratitude for national salvation only intensified Nelson's countrymen's affection for him. Says Arthur Herman, author of the acclaimed new book *To Rule the Waves: How the British Navy Shaped the Modern World*, "It was the Royal Navy, led by men like Horatio Nelson, that stopped [Napoleon] in his tracks, and preserved the liberty of Europe and the rest of the world."¹⁵ Naval supremacy not only fended off attack but allowed British trade—the foundation of national power—to thrive in the face of French commerce raiding. Alfred Thayer Mahan credited Britain's "watery bulwarks, traversed in every direction by her powerful navy," with securing the nation's "peaceful working as the great manufactory of Europe."¹⁶ Concluded Mahan, "Those far distant, storm-beaten ships upon which the Grand Army never looked, stood between it and the dominion of the world."¹⁷

Insulated from foreign enemies by two vast oceans, the United States has never faced the kind of mortal, seaborne threat that menaced Great Britain during its decades-long duel with France. Consequently, Americans are less likely to view their naval heroes as national saviors.¹⁸

GEOGRAPHY SHAPES ATTITUDES

Geography played a defining role in Britain's economic, political, and military life. Lord Halifax observed in 1694, "The first article of an Englishman's creed must be that he believeth in the sea."¹⁹ Writing in 1907, the British diplomat Eyre Crowe agreed, in less lyrical but more analytical terms. Britain's foreign policy, declared Crowe, was "determined by the immutable conditions of her geographical situation on the ocean flank of Europe as an island State . . . whose existence and survival . . . are inseparably bound up with the possession of preponderant sea power."²⁰

Despite Americans' kinship with and lingering affinity for British society, their nation's geography and traditions have attenuated their attitudes toward the sea. Unlike Britain, America is a continental empire first and a seapower second. Settling the American West consumed the energies of Americans during the nineteenth century, molding habits that persist today.²¹ It is no coincidence that our best known military heroes are soldiers and Marines—less dependence on the sea, less affection for seafarers.

Beginning in the 1880s with Theodore Roosevelt's *Naval War of 1812*, an influential band of expansionists, including Alfred Thayer Mahan, urged Americans to emulate the British model of seapower, acquiring colonies, building naval and merchant shipping, and wresting a share of international commerce away from the European great powers.²² At first the expansionists made little headway with their blandishments. Roosevelt nearly despaired of being able to rally public support for expansion, bemoaning evidence that Mahan was more popular in Europe than at home.²³ "I am glad Mahan is having such influence with your people," wrote Roosevelt to Hermann Speck von Sternburg, "but I wish he had more influence with his own. It is very difficult to make this nation wake up. . . . I sometimes question whether anything but a great military disaster will ever make us feel our responsibilities and our possible dangers."²⁴

Lord James Bryce, a British historian, observed during his travels in North America in the late 1880s that "the general feeling of the nation [was] strongly against a forward policy" in Hawaii and the other islands that captivated the expansionists. After talking to a cross section of Americans, however, Bryce prophesied that the public "would not stand by and see any other nation establish a protectorate" over the Hawaiian Islands or tolerate European efforts to occupy Caribbean islands.²⁵ No amount of abstract seapower propaganda would galvanize U.S. public opinion, but a foreign war might.²⁶ The Spanish-American War jolted Americans out of their comfortable isolationism, showing how prescient Bryce had been.²⁷ Only then did the expansionists' vision of a maritime commercial empire upheld by a potent navy become attainable.

TECHNOLOGY WORKS AGAINST HEROISM

Technological change also discouraged Americans from venerating their naval heroes. Battleships were romantic weapons, conjuring up images of single combat between mounted champions. These majestic vessels had public appeal. By the late 1800s, when the United States built its first battle fleet, the days of chivalric battles on the high seas were on the wane—witness the Royal Navy's vain attempt to replicate Trafalgar during World War I. Unglamorous weapons such as submarines and torpedoes offset British dreadnoughts at Jutland, the war's lone fleet engagement.²⁸ The U.S. Navy's Great White Fleet never saw action and in

any event was rendered obsolete when Britain's turbine-powered, all-big-gun *Dreadnought* slid down the ways in 1906.²⁹

Aircraft carriers emerged as the U.S. Navy's capital ships during World War II, relegating battleships to the obscure, if indispensable, roles of providing air defense for the carriers and naval gunfire support to troops ashore. With the advent of naval airpower, naval aviators were more likely than "ship drivers" to excite the public fancy. Outfitting the *Iowa*-class battleships with "gee-whiz" armaments and sensors, notably Tomahawk and Harpoon missiles, restored some of the dreadnoughts' romantic appeal. Nonetheless, these warships played a secondary role in their main modern combat mission, evicting Saddam Hussein's army from Kuwait in 1991, then speedily returned to mothballs.

It is tough to be a Nelson in modern naval warfare.

AMERICANS DON'T KNOW THEIR OWN HISTORY

Without its own Nelson to focus attention on the sea, the United States risks allowing its naval power to atrophy. If it does, the nation's military means could eventually fall dangerously out of step with its global political objectives. Americans are famously indifferent to their own history—its maritime component included. Surveys and studies have repeatedly shown how little students know, even at elite colleges and universities, let alone rank-and-file citizens, about American history.³⁰ This forgetfulness seems intrinsic to our national character. Observed the Princeton scholar Bernard Lewis in another context, "In current American usage, the phrase 'that's history' is commonly used to dismiss something as unimportant, of no relevance to current concerns."³¹

Whatever its merits, Americans' relentless forward-looking nature often blinds us to the value of historical experience. Nathaniel Philbrick, author of *Sea of Glory: America's Voyage of Discovery*, recently told *Naval History* magazine that America suffered from "a kind of amnesia" with regard to its maritime heritage.³²

With the gold rush and the rise of the West, America became obsessed with its own boundaries as the defining wilderness, when it was the sea that was essential to development of the nation. Not having a nautical or maritime background or perspective, a lot of historians don't know what to do with naval history. . . . So it's been a blind spot, both in American and global history.³³

Moreover, the egalitarian ethos on which the United States was founded works against public awareness of and interest in the nation's maritime traditions. Americans are skeptical of aristocracies, and the U.S. Navy officer corps borders on being an aristocracy. It is a truism in naval circles that Navy captains are the world's last absolute monarchs, enjoying near-total authority once their vessels put to sea. The endeavors of naval officers, consequently, tend not to resonate

with ordinary citizens in the same way as the exploits of soldiers and Marines. The nature of naval history accentuates Americans' already pronounced tendency to put the past behind them.

WHAT NEXT?

Does it matter whether America has a Nelson, and, more generally, whether America renews its love affair with the sea? Yes. Philbrick's "historical amnesia," far from being a harmless national quirk, has real strategic repercussions. The sea is vital to what America is. The loss of its nautical heritage deprives the nation of a fund of wisdom. Absent a sense of how naval power contributes to national security and prosperity, the electorate—the final authority over U.S. policy and strategy—has no way to balance the claims of the U.S. Navy against other important national priorities. Losing its historical moorings is perilous for an America with global interests that demand a vibrant naval strategy and force structure.

Shifts in the global balance of power increasingly place the free flow of commerce at risk. A contemporary scholar—echoing Mahan's description of the world's waterways as a "wide common," a medium through which commerce and military power could flow freely—rightly observed that control of the commons was the basis for U.S. preeminence in world affairs.³⁴ Rising powers, notably China, were amassing the wherewithal to create "contested zones" in which imposing U.S. naval dominance would be difficult if not impossible.³⁵ Globalization is a predominantly maritime phenomenon, just as it was in the day of Mahan and Roosevelt. If spreading globalization is in the U.S. national interest, the United States must maintain a navy sufficient to assure free navigation, commerce, and, in the words used by a recent commentator, "connectivity."³⁶

Therefore, it behooves sailors, veterans, naval historians, and the array of institutions friendly to the mission of the U.S. Navy to work to build public awareness of how seapower underpins national security and prosperity, as well as of the nation's efforts to foster security and prosperity overseas. Can they manufacture an American Nelson to focus attention on the sea? That is doubtful—Nelson's feats were imprinted on the minds of his contemporaries, not artificially recreated decades or centuries hence. There is no mortal threat to the United States from the sea to concentrate the public mind on maritime pursuits, let alone naval history, and the United States cannot shed its culture as a continental empire in favor of a maritime culture akin to that of the island nation, Great Britain. Nor is technological change likely to restore the heroic flair of nautical warfare. Quite the opposite: The advent of standoff weaponry, unmanned aerial vehicles, and other technological wizardry will likely continue to drain war on the high seas of its public appeal, perhaps permanently.

Today's proponents of naval history, consequently, should work to instill a more generalized affinity for the Navy and the sea—invent a corporate “Nelson,” as it were, an amalgam of all the virtues and heroism in U.S. naval history.

This promises to be a laborious undertaking. Cultures and traditions are stubborn things. As we have seen, even the impassioned pleas of turn-of-the-century expansionists failed to stir up much enthusiasm for maritime pursuits among the populace. Mahan, Roosevelt, and their cohort of expansionists, however, wrote primarily for an elite, northeastern audience.³⁷ They failed to broaden their appeal and, thus, political support for seapower beyond this enclave. Today's enthusiasts for seapower should not repeat this mistake but should undertake a concerted outreach campaign that extends not only to Middle America, but to U.S. Navy personnel, Congress, administration officials, and across disciplinary lines within the academic community.³⁸ The starting points for this enterprise in “public history” are:

- Recognize that seapower is interdisciplinary. Though it might appear to be a cohesive discipline, seapower is in fact interdisciplinary to an extraordinary degree. Mahan's concept of seapower as a phenomenon fusing history, strategy, economics and trade, geography, and a host of other disciplines provides a useful reference point. Tying naval history to globalization—and the prosperity globalization confers—in the minds of the residents of landlocked areas could amplify the effectiveness of any outreach campaign. While outreach within the historical profession is essential, moreover, any campaign must address a far larger cross section of the academic community.
- Realize that knowledge is scant within the U.S. government. The paucity of congressmen and administration officials with military service has occasioned much discussion in recent years.³⁹ Any outreach effort must seek to build a corps of spokesmen for naval history within the halls of government. To bolster knowledge and pride within the ranks of the U.S. Navy, it would be worth examining the extravagant effort the U.S. Marine Corps puts into cultivating these virtues within new recruits and seasoned Marines alike.⁴⁰ The Navy might incorporate elements of the Marines' training regimen into boot camps and officer accession programs, as well as more advanced schools.
- Use every tool available. Contemporary advocates of seapower enjoy a significant advantage over their forebears from Mahan's day. There is an abundance of electronic media to go along with the print media exploited by nineteenth-century expansionists. Naval historians ought to submit opinion columns on the anniversaries of great events and as opportunities present themselves. They might also start online journals or “weblogs,”

frequently updating websites packed with digital photographs and nautical history. The Naval Historical Center could accelerate the digitization of its photograph collection, much as the Library of Congress has done with its holdings—and so forth.

Propagating historical knowledge among a large, diverse populace promises to be a long, painstaking endeavor. The sooner advocates of American naval history get started, the better.

NOTES

1. Arthur Herman, *To Rule the Waves: How the British Navy Shaped the Modern World* (New York: HarperCollins, 2004), pp. 360–94.
2. George Gordon Byron, “Don Juan,” Canto I, in *Byron: Selected Poetry*, ed. A. S. B. Glover (London: Penguin, 1954), p. 194.
3. See, for instance, “The 200th Anniversary of the Battle of Trafalgar,” Royal Navy website, 12 May 2004, www.royalnavy.mod.uk/rn/content.php3?page=1&article=792.
4. Theodore Roosevelt, *The Naval War of 1812* (New York: Putnam, 1882; repr., Annapolis, Md.: Naval Institute Press, 1987); Hanson W. Baldwin, “Leyte Gulf: Kinkaid vs. Kurita, Etc.” in “*Fire When Ready, Gridley!*” *Great Naval Stories from Manila Bay to Vietnam*, ed. William H. Honan (New York: St. Martin’s, 1993), pp. 251–77.
5. On the importance of maritime history, see John B. Hattendorf, “The Uses of Maritime History in and for the Navy,” *Naval War College Review* 56, no. 2 (Spring 2003), available at www.nwc.navy.mil/press/Review/2003/Spring/art1-sp3.htm.
6. Herman, *To Rule the Waves*, pp. 360–94; John Keegan, *The Price of Admiralty: The Evolution of Naval Warfare* (New York: Viking Penguin, 1990), pp. 9–95; Charles R. Low, *Her Majesty’s Navy, Including Its Deeds and Battles* (London: Virtue, 1890), vol. 3., pp. 1–32.
7. Author’s e-mail correspondence with Dr. John Hattendorf, E. J. King Professor of Maritime History and Chairman, Maritime History Department, U.S. Naval War College, 22 February 2005.
8. Herman, *To Rule the Waves*, pp. 400–401.
9. Keegan, *Price of Admiralty*, pp. 9–95.
10. This famous exhortation came in a letter sent to every captain under his command at Trafalgar. One such letter, sent in 1803 to Captain Eliab Harvey of the HMS *Temeraire*, fetched sixty thousand pounds at auction in 2001—testifying to Britons’ enduring fascination with all things Nelsonian. “Nelson’s Letters for Sale,” BBC News, 9 November 2001, available at news.bbc.co.uk/1/hi/uk/england/1646747.stm
11. Herman, *To Rule the Waves*, p. 382.
12. See, for instance, “C-Span Survey of Presidential Leadership,” C-Span, 1999, available at www.americanpresidents.org.survey
13. Max Boot, *The Savage Wars of Peace: Small Wars and the Rise of American Power* (New York: Basic Books, 2002), pp. 3–29; Stephen Howarth, *To Shining Sea: A History of the United States Navy, 1775–1991* (New York: Random House, 1991), pp. 208–209; George W. Baer, *One Hundred Years of Sea Power: The U.S. Navy, 1890–1990* (Stanford, Calif.: Stanford Univ. Press, 1994), pp. 28–39.
14. Samuel Eliot Morison, *The Two-Ocean War: A Short History of the United States Navy in the Second World War* (Boston: Little, Brown, 1963), pp. 138, 287–90, 437–68.
15. Herman, *To Rule the Waves*, p. xix.
16. Alfred Thayer Mahan, *The Influence of Sea Power upon the French Revolution and Empire* (Boston: Little, Brown, 1894), vol. 2, p. 380.
17. Mahan, *French Revolution and Empire*, p. 118.
18. Indeed, the 11 September 2001 attacks on New York and Washington represented the first time that American soil had been

- attacked by a foreign enemy since the British assault on Washington during the War of 1812. See John Lewis Gaddis, *Surprise, Security, and the American Experience* (Cambridge, Mass.: Harvard Univ. Press, 2004), esp. pp. 7–34. One of the classic accounts of America's sense of separateness from the Old World is Dexter Perkins, *A History of the Monroe Doctrine*, rev. ed. (Boston: Little, Brown, 1963), pp. 3–26.
19. See also George Savile, "The Rough Draft of a New Model of the Sea, 1694," in Paul M. Kennedy's *The Rise and Fall of British Naval Mastery* (New York: Scribner's, 1976; repr., Fontana 1991), p. 4.
 20. Eyre Crowe, "Memorandum on the Present State of British Relations with France and Germany, January 1, 1907," in *British Documents on the Origins of the War 1898–1914*, vol. 3, *The Testing of the Entente, 1904–6*, ed. G. P. Gooch and Harold Temperly (London: His Majesty's Stationery Office, 1928), p. 402.
 21. Niall Ferguson, *Colossus: The Price of America's Empire* (New York: Penguin, 2004), esp. pp. 33–60. See also Frederick Jackson Turner, "The Significance of the Frontier in American History, 1893," paper read at the meeting of the American Historical Association in Chicago, 12 July 1893, first appeared in the *Proceedings of the State Historical Society of Wisconsin*, 14 December 1893, repr. Woodbridge, Conn.: Research 1975); Theodore Roosevelt, "The Spread of the English-Speaking Peoples," in *Memorial Edition: Works of Theodore Roosevelt*, vol. 10, *The Winning of the West*, ed. Hermann Hagedorn (New York: Scribner's, 1926), pp. 1–26.
 22. Roosevelt, *Naval War of 1812*. Mahan's best known work was *The Influence of Sea Power upon History, 1660–1783* (Boston: Little, Brown, 1890; repr. New York: Dover, 1987), which purported to derive lessons of permanent value from British naval history.
 23. Eyre Crowe, testifying to Mahan's influence, noted that "the tremendous influence of [maritime] preponderance has been described in the classical pages of Captain Mahan. No one disputes it." Crowe, "Memorandum on the Present State of British Relations with France and Germany," p. 402. See also Holger H. Herwig's "The Influence of A. T. Mahan upon German Sea Power," in *The Influence of History on Mahan*, ed. John B. Hattendorf (Newport, R.I.: Naval War College Press, 1991), pp. 67–80; and James R. Holmes's "Mahan: 'A Place in the Sun'" and "Germany's Quest for Sea Power," *Comparative Strategy* 23, no. 1 (January–March 2004), pp. 27–61.
 24. Theodore Roosevelt to Hermann Speck von Sternburg, 17 January 1898, in *The Letters of Theodore Roosevelt*, ed. Elting E. Morison et al. (Cambridge, Mass.: Harvard Univ. Press, 1951–54), vol. 1, pp. 763–64.
 25. James Bryce, *The American Commonwealth*, 2d. ed. (London: Macmillan, 1891), vol. 2, pp. 414–16.
 26. Carl Schurz, editor of *Harper's Weekly*, assailed Roosevelt's bellicose maxim that "no triumph of peace is quite so great as the supreme triumphs of war." Schurz rebuked Roosevelt for failing, "in his combative ardor," to notice "the logical quandary into which he has reasoned himself. It is this: according to him a long peace has a tendency to make a people effeminate and unpatriotic, while war will invigorate a people and inspire patriotism. But he argues also that the building of a great fleet of war-ships will be a means not to bring on war, but to preserve peace. Ergo, the building of a great war fleet will effect that which promotes effeminacy and languishing patriotism." Carl Schurz, "Armed or Unarmed Peace," *Harper's Weekly Magazine*, 19 June 1897, p. 603.
 27. Walter McDougall, *Promised Land, Crusader State: America's Encounter with the World since 1776* (New York: Mariner's Books; repr. 1998), esp. pp. 101–21.
 28. Keegan, *Price of Admiralty*, pp. 97–155.
 29. Robert K. Massie, *Dreadnought: Britain, Germany, and the Coming of the Great War* (New York: Random House, 1991), esp. pp. 468–97.
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31. Bernard Lewis, *The Crisis of Islam: Holy War and Unholy Terror* (New York: Modern Library, 2003), pp. xviii–xix.
 32. Nathaniel Philbrick, *Sea of Glory: America's Voyage of Discovery, the U.S. Exploring Expedition, 1838–1842* (New York: Penguin, 2004).
 33. "An Interview with Nathaniel Philbrick: 'What to Do with Naval History,'" *Naval History*, February 2005, available at www.usni.org/naulhistory/articles05/NHPhilbrickFeb.htm.
 34. Mahan, *Influence of Sea Power upon History*, p. 25.
 35. Barry R. Posen, "Command of the Commons: The Military Foundations of U.S. Hegemony," *International Security* 28, no. 1 (Summer 2003), pp. 25–46. On China's strategic outlook and military power, see James R. Holmes and Toshi Yoshihara, "The Influence of Mahan upon China's Maritime Strategy," *Comparative Strategy* 24, no. 1 (March 2005), pp. 53–71.
 36. Thomas P. M. Barnett, *The Pentagon's New Map: War and Peace in the Twenty-first Century* (New York: G. P. Putnam, 2004), esp. pp. 247–94.
 37. Ferguson, *Colossus*, pp. 33–60.
 38. Hattendorf, "The Uses of Maritime History in and for the Navy." Hattendorf documents how sparse knowledge of naval traditions is among active-duty personnel. This not only denies the service a fund of historical experience that could be of contemporary use but makes these personnel poor spokesmen for the U.S. Navy.
 39. A report commissioned in 2000 by Richard Danzig, then secretary of the Navy, concluded that the service had "failed to use the rich historical information available to it in order to manage or apply effectively these resources for internal or external purposes." History Associates, Inc., *History and Heritage in the U.S. Navy* (Rockville, Md.: October 2000), p. 3.
 40. See, for instance, Thomas E. Ricks, *Making the Corps* (New York: Scribner's, 1997), esp. pp. 53–72.



TRANSATLANTIC TENSION AND THREAT PERCEPTION

Mary Elise Sarotte

Europeans, now dealing with a second Bush tour of duty, are understandably wondering whether it will reverse the deterioration in transatlantic relations begun during the first. That the state of relations declined during the first term is not in doubt. Despite the initial outpouring of sympathy for the United States in late 2001 and early 2002, in 2003 a poll by the German Marshall Fund (GMF) found that an astonishing 81 percent of German and 82 percent of French respondents had come to disapprove of the way that President Bush was handling international policy.¹ In February and March 2004, the Pew Research Center repeated similar poll questions not only in Europe but also worldwide. When asked if they thought that American and British leaders had honestly believed that there were weapons of mass destruction in Iraq or had simply lied, 82 per-

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cent of French respondents said the leaders had been lying. The French percentage was higher even than that of Morocco (48 percent), Pakistan (61 percent), Turkey, and Jordan (both 69 percent).² These statistics are only a tiny sample; there are many more to this effect.³

The reasons underlying this unfortunate decline are numerous and have rightly received extensive attention. This essay will not repeat well-known arguments—most famously, Robert Kagan's view that Americans are from Mars and Europeans from Venus—but rather offer a new hypothesis. It will suggest how political history—and particularly the legacy of eighteenth-century politics—can help us to understand the current rift.

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THE ARGUMENT IN BRIEF

What governments perceive as a threat is determined by what they understand their areas of responsibility, and their priorities, to be. So, to understand threat perception, it is necessary to step back and look at the evolution of federal authority. In other words, it is necessary to ask a very basic question: What are the responsibilities of the central authority? Even a brief historical examination, such as that provided below, shows that Americans and Europeans have very different notions of federal authority, and that this, in turn, shapes their very differing threat perceptions. An understanding of this discrepancy will help prevent both sides from talking past each other during the second Bush administration.

METHODOLOGY AND DEFINITIONS

A few clarifications are necessary before getting under way. First, this article will employ the methodology of political history. It will focus on American and European perceptions of how a national authority can best respond to global threats and on the impact of the disparity between their views. It will not attempt, in the limited space available, to show that Americans are right and Europeans are wrong, or vice versa. Rather, the goal of this article is to highlight the discrepancies, which have themselves received insufficient attention. Secondly, threat perception for present purposes means the public understanding of threat, as displayed in polling data, speeches, and public proclamations.⁴

Finally, it is important to define “U.S. power” as used here. The focus will be on American military power, because the transatlantic rift is, in large part, a debate about how that should be used in the world (if at all). As a result, before debating how to use U.S. might, it is helpful to make at least a brief attempt to quantify just how much of it there is. Depending on which figures are included, U.S. defense spending tops that of the next twelve to fifteen nations combined and represents between 40 and 50 percent of all world spending on defense.⁵ The United States maintains 752 military installations in 130 countries, with significant numbers of troops in sixty-five of these.⁶ As Princeton’s Professor John Ikenberry puts it, “U.S. military bases and carrier groups ring the world. Russia is in a quasi-formal security partnership with the United States, and China has accommodated itself to U.S. dominance, at least for the moment. For the first time in the modern era, the world’s most powerful state can operate on the global stage without the constraints of other great powers.”⁷

Of course, there are many different kinds and levels of power exertion, as anyone with even a passing familiarity with Joseph Nye’s multilevel chessboard knows. In their book *America’s Inadvertent Empire*, retired general William Odom and coauthor Robert Dujarric inventively measure American power not only by its defense budget but also by the youth of its population and even by the

number of articles published in a year by the Harvard economics faculty (more than that of any continental European country).⁸ Yale professor Paul Kennedy also looks to less obvious indicators. He cites the fact that scholars working in the United States have won 75 percent of Nobel Prizes in science, medicine, and economics as evidence of American dominance.⁹ Indeed, in May 2004, *Science* ranked universities around the world on the basis of easily tabulated indicators, such as numbers of articles cited and prizes won. Of the top fifty universities worldwide, thirty-five were American.¹⁰

None of this makes the United States invulnerable, of course. Its indebtedness and current-account deficit render it financially vulnerable. As the world's strongest military power, it is also the world's most tempting target. It also has to contend with the classic security dilemma—it must perpetually worry about whether its predominance might provoke a balancing reaction and, if so, when and in what form. Nonetheless, there is a quantitative strength that informs Bush administration thinking about its obligations (or lack thereof) to the world.

USING POLITICAL HISTORY TO HIGHLIGHT DIFFERENT UNDERSTANDINGS OF “FEDERALISM”

How can political history help us understand the current transatlantic rift? It illuminates the fundamental transatlantic divide as to what kind of security the central government should provide. Americans and Europeans have very different views of the role of the federal government in providing for their national security. It is even hard to know what language to use to describe this gap; the American notion of “federal authority” barely translates into the European context. In continental Europe, “federal” is a word associated largely with the European Union (EU) and connotes dispersal of authority. In the United States, the “federal government” (or even the “feds”) is a shorthand reference to the national government and centralized power—a twist effected centuries ago by James Madison to co-opt opponents of a strong central government, as will be discussed below. So, American citizens can talk of federal power, but the phrase is often lost in translation, since its meaning is different in the European context.

When this discrepancy in the understanding of “federalism” overlaps with transatlantic debates about how best to ensure security, it becomes apparent that a curious collision of historical legacies is happening. The three main legacies are a narrow U.S. interpretation of the role of the federal government, which originated in the eighteenth-century debate over how much central authority was permissible; the Cold War expansion of federal power in light of the need for an extensive American national security apparatus; and a very different European notion of the responsibilities of a central authority.

A Narrow U.S. View of the Federal Government's Security Role

To understand the present American view of the federal government's security role, it helps to investigate its origins in one of the most revered collections of documents in the nation's political history, the *Federalist Papers*. Authored by Alexander Hamilton, John Jay, and James Madison, these eighty-five essays were published in the New York *Independent Journal* newspaper in 1787 and 1788. They represented an eloquent effort to sway doubting members of the public in favor of ratifying the draft U.S. Constitution and of creating a strong national government. Given how revered the Constitution is today, it is important to remember how controversial it was originally. Citizens of the United States at the time had the evils of overly powerful central authority fresh in their memories. They had recently fought a war to rid themselves of the rule of the British monarch. However, the weak central authority erected after the war under the Articles of Confederation had proved unequal to the task of governing the fragile new country. The draft produced at the Constitutional Convention in the summer of 1787 was a daring attempt to redefine national government. The authors of these papers were hoping to steal their opponents' thunder by calling themselves "federalists" and the strong central government they proposed a *federal* one.¹¹

Jay, future chief justice of the Supreme Court, argued in *Federalist* 3 that "among the many objects to which a wise and free people find it necessary to direct their attention, that of providing for their *safety* seems to be the first." He pessimistically continued in *Federalist* 4, "It is too true, however disgraceful it may be to human nature, that nations in general will make war whenever they have a prospect of getting anything by it." As a result, a crucial justification for creating a strong national authority was defense. "Leave America divided into thirteen or, if you please, into three or four independent governments—what armies could they raise and pay—what fleets could they ever hope to have? If one was attacked, would the others fly to its succor, and spend their blood and money in its defense?"

In other words, the very first justification for political union offered by three of America's greatest political minds was what U.S. leaders would today call homeland security. This view, rather than fading in the following centuries of American growth and expansion, has remained a significant strain of contemporary conservative political thought. It holds that protecting U.S. territorial integrity is not just the first but the *only* truly vital mission of the U.S. federal government.¹² It is a view prevalent in much of America to this day, and not just in the post-9/11 "red states." In 1996 and again in 2000, RAND, the Kennedy School, and the Nixon Center jointly organized a Commission on U.S. National Interests. The commission could find only four: territorial integrity, security of all of North America, prevention of domination of Europe and Northeast Asia

by a hostile power, and maintenance of key international trading and financial networks. Of these, the first was the only truly vital one.¹³

In contrast, today's Europeans—even the British—expect much more from their national leaders than territorial defense: free (or low-cost) health care and university-level education, national news broadcasting, and public transportation, to name just a few. In other words, the narrow view of federal authority exemplified by the right wing of the Republican Party is badly at odds with the view even of those Europeans right of center, to say nothing of the left.

The Cold War Legacy

This narrow American understanding of federal authority, strategic weakness in the eighteenth and early nineteenth centuries, and the strains of continental expansion and civil war meant that the resulting U.S. foreign policy was an inward-looking one. Indeed, at first glance it might seem that the only logical foreign policy that could arise from such a narrow view would be isolationism. Conflict with Mexico notwithstanding, it took the events of the twentieth century to prove otherwise—that such a narrow understanding of federal responsibility can, and does, translate into interventionism. In other words, there has always been agreement across the U.S. political spectrum on the need to defend the homeland. The eternal question is how. As memorably phrased by political scientist Michael Roskin, the conundrum is whether that defense starts “on the near or far side of the ocean.”¹⁴

Woodrow Wilson was the first president to make a sustained effort to defend U.S. security on the far side of the ocean. Whether he did so out of idealism (as say his supporters) or imperialism (as say his detractors), the relevant point for our purposes is that he was clearly unafraid of action overseas. As the British political scientist Michael Cox and others have argued, “he was never squeamish when it came to using American force abroad: he did so in fact on no fewer than seven occasions between 1914 and 1918.”¹⁵ After the end of World War I, however, he lost the political backing needed to continue engagement abroad in peacetime.¹⁶ He could take the United States into World War I, but he could not establish interventionism as a legacy, or so it seemed. The matter appeared firmly settled in favor of isolationism.

The catastrophe of the Weimar era not only reopened the matter sooner than anyone expected but decisively created a new legacy of American engagement abroad. In his *Surprise, Security and the American Experience*, Yale historian John Lewis Gaddis praises President Franklin Delano Roosevelt for realizing this sooner and more clearly than anyone else. He argues that FDR's true genius lay in his ability to embed “conflicting unilateral priorities within a cooperative multilateral framework.” In other words, Roosevelt realized that the “pursuit of

national interests . . . need not preclude the emergence of collective interests, because nobody had an interest in fighting another great war.”¹⁷ His cooperative approach—that is, starting U.S. defense on the far side of the ocean in cooperation with the people who lived there—proved to be one of the most successful grand strategies of all time.

This switch to defending the United States “on the far side of the ocean,” which defined the Cold War, had far-reaching consequences not only for foreign policy but also for U.S. domestic politics. The creation of a permanent massive national security apparatus greatly increased the power of the federal government in Washington, D.C. As Ikenberry and his coauthor Daniel Deudney argue, it also served to strengthen American national identity by overcoming “ethnic and sectional differences and the ideological heritage of individualism.”¹⁸ Writing in 1994, they predicted that the sudden end of the Cold War would cause these accomplishments to unravel. In other words, the pendulum would swing back to calling for defense on the *near* side of the ocean, with a corresponding decrease in interest in international issues.¹⁹ Various statistics from the 1990s support their observation. American spending on coverage of foreign news declined. Foreign language courses emptied of students.²⁰ Even PhD candidates in political science did not have to learn the language or culture of the countries in which they were supposedly becoming expert.²¹

Crucially, 11 September 2001 stopped the pendulum. This in turn created a paradox. In responding to the terrorist attacks of that day, the Bush administration launched upon a mission that is, although not in detail, fundamentally Cold War in spirit. Namely, it is starting the defense of the homeland on the far (sometimes very far) side of the ocean. As a result, two legacies have collided. The administration is using U.S. might to undertake a mission consistent with the Cold War, or interventionist, legacy, even as it subscribes to the earlier legacy of limited federal responsibility. Its narrow view of the role of the central government is, for example, the rationale that inspires the Bush administration’s fervent tax-cutting philosophy. The inherent conflict between the two legacies is crucial.

The world is no longer in the post–Cold War, or even post-post–Cold War, period but rather what might properly be called the Washington Era, for it is Washington’s convictions and contradictions that define it. This contradiction is central to the administration’s foreign policy, so it is worth detailing the policy consequences. The poor fit between these two legacies manifests itself in profound policy-making ambivalence. The chief result is the paradoxical (and counterproductive) combination of wars of prevention overseas with a decrease in both taxation and federal programs at home. It produces, first, equally fervent desires to send troops abroad and to bring them home, both quickly; second, willingness to call for cooperative security but to defeat or to abandon

agreements in the Senate or on the campaign trail; and third, insistence that others comply with international accords even as the United States exempts itself.²² Of course, there are deeper contradictions as well. As historian Mel Leffler rightly points out, “If one’s credibility is vested in the achievement of too many goals, one’s relative power will erode and one’s core values may become imperiled.”²³

Moreover, on a practical level, the administration is fighting a new kind of asymmetric war against transnational, nonstate actors while burdened with not just Cold War concepts but the very same national security institutions. If the mission is Cold War in spirit, many U.S. national security institutions are also Cold War in practice. As the 9/11 Commission’s concluding report of July 2004 maintained, the federal government still has much outdated national security bureaucracy and needs updating as soon as possible.²⁴ It remains to be seen whether the intelligence reform bill passed in December 2004 will institute significant changes in the security practices.

American versus European Threat Perceptions

What does this clash of legacies imply for threat perception? To the president and chief executive officer of RAND, James Thomson, it is apparent that the breakdown in American-European relations has its fundamental roots “in the different strategic appraisals of . . . Germany, France and several smaller European countries.”²⁵ Just as Europeans have different expectations from their national governments, they also have different assessments of what constitutes a threat to their well-being—in other words, requires a response. What does this mean in practice?

Post-9/11, the United States senses a new vulnerability and a new kind of existential threat. Its defense budget has risen, topping four hundred billion dollars in fiscal year 2005. September 11 has even enabled the Bush administration to explore ways to reexamine the utility of nuclear weapons, in particular so-called mini-nukes. As deterrence scholar Patrick Morgan puts it, “Inside its military establishment, in Congress, industry and the public there are clusters devoted to finding better living through nuclear weapons. . . . All are hoping to make nuclear weapons steadily more usable.”²⁶

In contrast, for many European political leaders, particularly the United Kingdom, Spain, Italy, and Germany, terrorism is an old problem. European states, and the EU as a whole, did indeed tighten their domestic security measures in response to both the 2001 and the Madrid attacks. But a high-profile Council on Foreign Relations task force headed by Henry Kissinger and Lawrence Summers pointed out in 2004 that many NATO allies had begun “questioning the administration’s insistence that the security of all nations was now at risk.”²⁷ As Robert Kagan put it, in a 2004 updating of his famous 2002 article,

Most Europeans never fully shared Washington's concerns about weapons of mass destruction (WMD) in Iraq, Iran, and North Korea—not during the Clinton administration, and not since. . . . Rightly or wrongly, Europeans do not believe that those weapons will be aimed at them. To the extent that they do worry, moreover, most Europeans do not look to the United States to protect them anymore. . . . Instead, they ask, Who will guard the guards?²⁸

Even as American politicians sound the alarm, Europeans sound skeptical. U.S. Department of Homeland Security “orange alerts” provoke shrugs on the continent. To cite just one example, when Tom Ridge made American headlines on 6 August 2004 with his elevated-threat warning to financial districts in the New York and Washington, D.C., areas, EU officials yawned. The union's counterterrorism director, Gijs de Vries, remained on vacation. The director of Germany's Institute for Terrorism Research and Security Policy, Rolf Tophoven, questioned the timing and echoed former U.S. presidential candidate Howard Dean in his assessment of the August alert: “You shouldn't forget that there is an election campaign and that in times of crisis people tend to rally around the incumbent government. This is not a bad thing for Bush.”²⁹ As Richard Betts has pointed out, the failings of the American intelligence community in the run-up to the Iraq war, and subsequent investigations into what went wrong, have created enormous skepticism about U.S. worries.³⁰

European political leaders are, of course, worried by Islamic extremism. But their threat assessment encompasses a greater variety of concerns. Although almost never voiced publicly by elected European officials, there is concern about Russia. It is rarely announced as policy, but the force structure of the Bundeswehr—still, all these years after the end of the Cold War, organized to defend the homeland against tanks coming from the east—makes it obvious. In a way that frustrates and confounds its NATO partners, Germany still *de facto* prioritizes conventional territorial defense even as it pledges allegiance to the Petersberg tasks,* which presume force projection capabilities.³¹

The Russians returned the favor. In a speech in London on 13 July 2004, Russian defense minister Sergei Ivanov spoke bluntly of his country's feelings about NATO expansion to the Baltics:

You are all aware of our calmly negative attitude towards expansion of the North Atlantic alliance. . . . What alarms us the most, from the point of view of our own security is the NATO deployment of means and forces on the territory of its new members. . . . Our anxiety over the state of arms control in Europe is based on the fact that the “gray zone” in this sphere has evolved in Europe for the first time in the

*Steps designed to improve the operational capability of the Western European Union (WEU), as contained in the Petersberg Declaration, issued by a WEU Council of Ministers meeting in Bonn, 19 June 1992.

last fifteen years. We wouldn't like Europe to return to the principles of balance of power, but there may be no vacuum in the military-political situation. Especially if this vacuum is filled with irresponsible statements of nationalistic character. Frankly speaking, the existence of European states that do not observe standard norms of democracy and human rights is interpreted by Russia as a threat.³²

With a few changes of names and dates, much of this language would still represent serviceable Cold War boilerplate. However alarming it might sound to Europeans, however, it rated barely a mention in the United States. The Bush administration, despite the Yukos Oil Company drama at the end of 2004* and an internal review begun early in 2005, largely considers Russia to be a solved problem—and it is undertaking significant force restructuring in Europe. On 16 August 2004, President Bush announced to a convention of the Veterans of Foreign Wars that the Pentagon would withdraw sixty to seventy thousand troops from Europe and Asia—mainly two heavy divisions now based in Germany—over the course of the next ten years.³³ The second-term administration may be caught very short indeed if de-democratization in Russia accelerates.

There is also an argument, not uncommon in Washington, that the issue that most concerns European elected officials is not territorial but *job* security, or to be more precise, the security of jobs in the European defense industry. European security specialist Mette Sangiovanni has argued forcefully that ESDP[†] is pointless, because lack of European political unity (not to mention the expected need for a United Nations mandate) would emasculate it in the face of any crisis. But the one value that even she finds in ESDP is that its success would “restructure the European defense industry in order to develop a stronger and more efficient high-tech industrial sector.” It would “offer opportunities to rationalise defence spending and reduce procurement costs through cooperation on armaments production and undo the dramatically increased reliance on U.S. defense products.”³⁴

FOR WHAT THREATS TO DOMESTIC SECURITY IS FEDERAL AUTHORITY RESPONSIBLE?

It is an exaggeration, but one useful for highlighting the discrepancy at hand, to say the main uncontested role of the U.S. national government is to provide territorial security, while the main uncontested role of most European national governments is to provide *economic* security. Obviously the two are interrelated,

*That is, the jailing of its founder, then the seizure and forced sale to the government of its largest unit.

†European Security and Defense Policy, an EU initiative arising from the 1999 Amsterdam Treaty: “The central aim is to complete and thus strengthen the European Union’s external ability to act through the development of civilian and military capabilities for international conflict prevention and crisis management.” (“External Relations,” *Europa*, europa.eu.int/comm/external_relations/esdp/.)

but they remain distinct. The job of territorial security in Europe has de facto been “outsourced” to—depending on the circumstances—nascent EU security institutions, NATO, or coalitions of the willing. Even British military planning is now based on the assumption that any military conflict involving the United Kingdom would also involve the United States, and its leaders shape procurement accordingly.³⁵

To repeat the argument stated in brief at the outset, what a government perceives as a threat is determined by what it understands its areas of responsibility—and its priorities—to be. For the U.S. federal government, maintaining territorial integrity is a much higher priority than, say, enabling its citizens to obtain a university-level education. It would be absurd to say that European national governments do not care about territorial integrity; obviously, they do. But other priorities accompany it near the top of their lists of concerns. Their understanding of what constitutes “homeland security”—a phrase not commonly used in Europe, as opposed to the United States—is much broader than the American view, as it includes a commitment to social welfare programs unmatched in the United States. European leaders, and particularly Germans, place a much higher priority on such challenges as European integration and management of their social market economies. Moreover, European voters and national governments alike worry, in a way that the United States does not understand, about the threat posed by America itself. The worry is not a straightforward notion that somehow the United States will become an enemy of Europe again. Rather, there exists concern both that American behavior will damage the efficacy of a rule-based international order and that its actions will create an enormous anti-Western backlash that could engulf Europe as well as the United States.

In short, because of profoundly varying understandings about both the nature and responsibilities of federal authority, Washington and European leaders are talking past each other. The answer to the question, “What threats to domestic security is federal authority responsible for?” is a very different one on opposite sides of the Atlantic. To answer this question, Europeans would first need to clarify what is meant by “federal” authority. Then they would produce a long list of duties. Hence, the individual national capitals have fewer resources to devote to each of the tasks, and the European Union security apparatus is still too new to compensate with economies of scale in the provision of security.

The American response would be a different and—as the historical analysis here has shown—internally contradictory one. The Bush administration, contrary to the sweeping proclamations made in the second inaugural speech on 20 January 2005, ultimately adheres to a narrow version of federal authority. For this reason the White House spent much of the day after the inaugural speech downplaying its significance, a curious follow-up to a major presidential address.³⁶

In summary, the U.S. position represents the awkward combination of two different historical legacies. The contradictions inherent in these legacies help to explain some of the paradoxes of first-term Bush administration foreign policy, and the same clash of legacies will continue to inform policy making in the second term. When the Bush team said “four more years” during the campaign, it meant just that. The second Bush administration is peopled largely by individuals who do not feel that they need to change their approach drastically. Hence contradictions from the first term will persist. The more that its European partners understand about this inherent contradiction, and the more that Americans understand about the very different European understanding of “homeland security,” the better they will be able to deal with each other in the coming years.

NOTES

1. “Transatlantic Trends 2003,” project of the German Marshall Fund of the United States and the Compagnia di San Paolo (Turin, Italy), p. 5. Available at the GMF website.
2. Pew Research Center, poll of 7,500 respondents in nine countries, conducted February–March 2004. Available on the Pew website.
3. On the subject of views of America in Europe, see also the work of the British scholar Richard Crockatt, *America Embattled: September 11, Anti-Americanism and the Global Order* (London: Routledge, 2003).
4. No longer having a security clearance, I cannot address questions of classified threat assessment within the professional intelligence community. I served as a White House Fellow from 4 September 2001 until 2 September 2002 and held a security clearance in that capacity.
5. Eliot A. Cohen, “History and the Hyperpower,” *Foreign Affairs* (July/August 2004). As he puts it on page 52, “The U.S. now accounts for between 40 and 50 percent of global defense spending, more than double the total spending of its European allies (whose budgets are so riddled with inefficiencies that, aside from territorial defense, peacekeeping, and some niche capabilities, the European pillar of NATO is militarily irrelevant).”
6. Niall Ferguson, *Colossus: The Price of America's Empire* (New York: Penguin, 2004), pp. 16–17.
7. G. John Ikenberry, “Illusions of Empire: Defining the New American Order,” *Foreign Affairs* 83, no. 2 (March/April 2004).
8. William E. Odom and Robert Dujarric, *America's Inadvertent Empire* (New Haven, Conn.: Yale Univ. Press, 2004), see pp. 92 and 161, and all of chaps. 3, 4, and 6.
9. Paul Kennedy, “The Conundrum of American Power in Today's Fragmented World,” Lady Margaret Lecture, Christ's College, Cambridge, 20 November 2002, available with accompanying PowerPoint slides at www.yale.edu/iss.
10. Martin Enserink, “Reinventing Europe's Universities,” *Science* 304 (14 May 2004), pp. 951–52. Cambridge and Oxford were the only two non-American institutions in the top ten.
11. There are countless editions of the *Federalist Papers* available, but a recent one with a useful introduction is James Madison, Alexander Hamilton, and John Jay, *The Federalist Papers* (New York: Penguin Books, 1987). They are also available at many websites, of which the Avalon Project of Yale University Law School is one of the better ones.
12. The NATO politician Zachary Selden summarizes this mood as follows: “The primary

- and perhaps exclusive task of the federal government is to protect its citizens from external threats." Selden is the director of the defense and security committee of the NATO Parliamentary Assembly. See Zachary Selden, "Neoconservatives and the American Mainstream," *Policy Review*, no. 124 (April/May 2004).
13. James Thomson, "U.S. Interests and the Fate of the Alliance," *Survival* 45 (Winter 2003–2004), pp. 208–209.
 14. Roskin, Michael. "From Pearl Harbor to Vietnam: Shifting Generational Paradigms and Foreign Policy," *Political Science Quarterly* 89 (Autumn 1974), p. 563.
 15. Michael G. Cox, G. John Ikenberry, and Takashi Inoguchi, eds., *American Democracy Promotion: Impulses, Strategies, and Impacts* (New York: Oxford Univ. Press, 2000), p. 6.
 16. For a useful and succinct summary of Woodrow Wilson's life and work, see John A. Thompson, *Woodrow Wilson* (London: Pearson, 2002).
 17. John Lewis Gaddis, *Surprise, Security, and the American Experience* (Cambridge, Mass.: Harvard Univ. Press, 2004), p. 51.
 18. Daniel Deudney and G. John Ikenberry, "After the Long War," *Foreign Policy* 94 (Spring 1994), available online. As they put it, the Cold War "created a new model for relations between the state and society."
 19. The declining interest in foreign news throughout the 1990s suggests that Deudney and Ikenberry were right (Garrick Utley, "The Shrinking of Foreign News," *Foreign Affairs* 76 [March/April 1997], available online). As Walter Russell Mead puts it, "In the view of the Red States, fascism and communism both originated in Europe and flourished worldwide because Europeans supported them—they died in large part because Americans fought them at great cost in treasure and blood. For the Red States, case closed." Walter Russell Mead, "Goodbye to Berlin?" *National Interest* 75 (Spring 2004), p. 21.
 20. Walter Laqueur, *No End to War: Terrorism in the Twenty-first Century* (New York: Continuum, 2003), see p. 129ff.
 21. The American Political Science Association investigated requirements for earning a doctorate in 2003. A survey of nearly all top U.S. universities revealed that 84 percent required no foreign-language ability or accepted a knowledge of statistics instead, and 91 percent had no qualitative requirements whatsoever. In other words, political scientists earn their stripes without having to demonstrate any knowledge of the language or history of the regions in which they are expert. Andrew Bennett, Aaron Barth, and Kenneth R. Rutherford, "Do We Preach What We Practice? A Survey of Methods in Political Science Journals and Curricula," *Political Science and Politics* 36 (July 2003), pp. 373–78.
 22. See Nicole Deller et al., *Rule of Power or Rule of Law? An Assessment of U.S. Policies and Actions Regarding Security-Related Treaties* (New York: Apex, 2003); and John F. Murphy, *The United States and the Rule of Law in International Affairs* (Cambridge, U.K.: Cambridge Univ. Press, 2005).
 23. Melvyn P. Leffler, "National Security," in *Explaining the History of American Foreign Relations*, ed. Michael J. Hogan and Thomas G. Paterson, 2d ed. (Cambridge, U.K.: Cambridge Univ. Press, 2004), p. 135.
 24. *The 9/11 Commission Report: Final Report of the National Commission on Terrorist Attacks upon the United States*, official government ed. (Washington, D.C.: U.S. Government Printing Office, 2004), p. 399, available at a257.g.akamaitech.net/7/257/2422/05aug20041050/www.gpoaccess.gov/911/pdf/fullreport.pdf.
 25. Thomson, "U.S. Interests and the Fate of the Alliance," p. 207. He adds: "These differences stem from divergences in views of vital security interest, threats to those interests and the role of military force in security policy. These divergences had their beginnings on 9 November 1989, when the Berlin Wall came down, and became clearer after the terrorist attacks on 11 Sept. 2001."
 26. Patrick M. Morgan, *Deterrence Now* (Cambridge, U.K.: Cambridge Univ. Press, 2003), pp. 282–83.
 27. Henry A. Kissinger and Lawrence H. Summers, co-chairs; Charles A. Kupchan, project director, *Renewing the Atlantic Partnership: Report of an Independent Task Force Sponsored by the Council on Foreign Relations* (New York: Council on Foreign Relations, 2004), p. 3.

28. Robert Kagan, "America's Crisis of Legitimacy," *Foreign Affairs* 83, no. 2 (March/April 2004), available online.
29. Katrin Bennhold, "Europe Takes New Alerts with Grain of Salt," *New York Times*, 6 August 2004, p. A9.
30. For a discussion of the way in which the failure to find weapons of mass destruction has aroused ire not only abroad but at home, see Richard K. Betts, "The New Politics of Intelligence: Will Reforms Work This Time?" *Foreign Affairs* (May/June 2004), available online. For examples of skepticism published by U.S. presses, see Bruce Cumings et al., *Inventing the Axis of Evil: The Truth about North Korea, Iran, and Syria* (New York: New Press, 2004), and Benjamin Barber, *Fear's Empire: War, Terrorism, and Democracy* (London: Norton, 2003).
31. This is one of the conclusions of my *German Military Reform and European Security*, Adelphi Paper 340, (London: Oxford Univ. Press for the International Institute for Strategic Studies [IISS], 2001).
32. Sergei Ivanov, "Russian-NATO: Strategic Partners in Response to Emergent Threats," speech to IISS, 13 July 2004. In the printed form of his remarks distributed by IISS, these comments appear on pp. 21–22.
33. Elisabeth Bumiller, "Bush Tells Veterans of Plan to Redeploy G.I.'s Worldwide," *New York Times*, 17 August 2004, p. A6. Since Bush made this announcement in the crucial swing state of Ohio during the hotly contested 2004 election year, clearly the administration was assuming this would be a popular move with voters.
34. Mette Eilstrup Sangiovanni, "Why a Common Security and Defence Policy is Bad for Europe," *Survival* 45 (Winter 2003–2004), p. 197. One example of EU protectionism is the Eurofighter, a project that survives even as the chances that the EU will ever need to use it for its designated mission—air-to-air combat—grow ever more remote.
35. See, in *The Economist*, "Thinning the Ranks," 22 July 2004, and "Lions Equipped by Donkeys," 29 July 2004.
36. See, for example, "Bush Doctrine is Expected to Get Chilly Reception," *Washington Post*, 23 January 2005, which notes that after the speech "administration officials have since tried to tamp down expectations of a radical shift in policy."

COME THE REVOLUTION

Transforming the Asia-Pacific's Militaries

Richard A. Bitzinger

Defense transformation has preoccupied the U.S. Defense Department for over a decade. In recent years as well, militaries and governments throughout the Asia-Pacific region have begun to pay attention to the promise and requirements of defense transformation and to the emerging information-based revolution in military affairs (RMA). Increasingly, their conceptions of defense transformation, along with their intentions, efforts, and capabilities to transform their militaries, could have a profound effect upon regional stability and security. These activities could particularly affect future American security interests and military operations in the Asia-Pacific—both due to their potential to influence joint operations and interoperability with U.S. forces and by endowing new capabilities upon potential competitors and adversaries—and therefore could inject new uncertainties and complications into the regional security calculus.

Defense transformation is much more than the “mere” modernization of one’s armed forces—that is, being able to fight better the same kinds of wars. Rather, it is the promise of a paradigm shift in the character and conduct of war-

fare. At the same time, it is more than simply overlaying new technologies and new hardware on existing force structures; it requires fundamental changes in military doctrine, operations, and organization. For these reasons, therefore, transformation is an increasingly loaded issue, with many implications for defense and security in the Asia-Pacific. Moreover, for these same reasons, transformation in the region is beset with considerable challenge.

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This article specifically addresses the process, problems, and prospects of and for defense transformation in the Asia-Pacific region. Basically, it argues that while several countries there are closely studying and assessing the implications of the emerging revolution in military affairs, they have, for a variety of reasons, made little progress so far in actually transforming their armed forces along its lines. In fact, most countries in the region are unlikely, despite their best efforts, to move beyond “modernization-plus,” at least not any time soon. Even this process of innovation, however, could still have many repercussions for regional security and stability, and in ways not currently being contemplated.

WHAT DO WE MEAN BY DEFENSE TRANSFORMATION?

“Defense transformation” is an ambiguous but nevertheless bounded term. No strong consensus exists as to what defense transformation exactly means or entails. Some analysts and proponents of defense transformation view it as simply another name for the revolution in military affairs.¹ Certainly the two terms are used increasingly interchangeably. But this still leaves unanswered what we mean by a revolution in military affairs and what the current RMA stands for. To cloud the issue even further, some students of defense transformation define it mainly as a process of implementing an RMA, while others see it as an objective in and of itself.

A revolution in military affairs is generally described as a “discontinuous,” or “disruptive,” change in the concept and mode of warfare.² For example, it has been argued that a revolution in military affairs occurs when “the application of new technologies into a significant number of military systems combines with innovative operational concepts and organizational adaptation in a way that fundamentally alters the character and conduct of a conflict. It does so by producing a dramatic increase . . . in the combat potential and military effectiveness of armed forces.”³ In a similar vein, the RAND Corporation defines an RMA as “a paradigm shift in the nature and conduct of military operations which either renders obsolete or irrelevant one or more core competencies in a dominant player, or creates one or more core competencies in some dimension of warfare, or both.”⁴

Most analysts and proponents of defense transformation are in general agreement that the current RMA—and therefore the current process of transformation—has been primarily driven and enabled by dramatic advances in information technology (IT) over the past two or three decades. The information revolution, supplemented by recent advances in new materials and construction techniques, has made possible significant innovation and improvement in the fields of sensors, seekers, computing and communications, automation, range, precision, and stealth.⁵ In one sense, therefore, defense transformation is inexorably linked to

emerging concepts of network-centric warfare (NCW, sometimes referred to as “network-enabled” warfare)—vastly improved battlefield knowledge and connectivity through IT-based breakthroughs that create more capable command, control, communications, computing, intelligence, surveillance, and reconnaissance (C4ISR) networks. NCW, according to the Defense Department’s Office of Defense Transformation, “generates increased combat power by networking sensors, decision makers, and shooters to achieve shared awareness, increased speed of command, high tempo of operations, greater lethality, increased survivability, and a degree of self-synchronization.”⁶

The key characteristics of a transformed force, therefore, include:

- Networked C4ISR, weapons, and platforms
- Shared situational awareness
- More accurate and standoff engagement
- Agility, speed, rapid deployability, and flexibility
- Jointness and interoperability.⁷

In a larger sense, too, defense transformation is synergistic—it entails the integration and employment of C4ISR systems, platforms, and weapons (particularly smart munitions) in ways that increase their aggregate effectiveness and capability beyond their individual characteristics. This bundling together is reminiscent of William A. Owens’s “system of systems” concept, in that it entails the linking together of several types of discrete and even disparate systems across a broad geographical, interservice, and electronic spectrum in order to create new core competencies in war fighting.⁸

Obviously, defense transformation entails much more than just force modernization. Hardware and technology are obviously crucial and primary components, fundamental building blocks in the modern, IT-based RMA, centered on network-centric warfare and reconnaissance-strike complexes. Transformation, however, is not simply a techno-fix. It entails fundamentally changing the way a military does its business—doctrinally, organizationally, and institutionally. It also requires advanced systems integration skills to knit together disparate military systems into complex operational networks. Finally, it demands elemental changes in the ways militaries procure critical military equipment, and reform of the national and defense technological and industrial bases that contribute to development and production of their transformational systems. All this, in turn, requires vision and leadership at the top in order to develop the basic concepts of defense transformation, establish the necessary institutional and political momentum for implementing transformation, and allocate the financial resources and human capital required for the task of implementation.⁹

DEFENSE MODERNIZATION IN THE ASIA-PACIFIC

Many militaries in the Asia-Pacific have greatly expanded their war-fighting capacities since the beginning of the 1990s. This modernization effort has gone far beyond merely replacing older fighter aircraft with more sophisticated versions or buying new tanks and artillery pieces; rather, they have over the past decade added capabilities that they did not possess earlier, such as new capacities for force projection and standoff attack, low observability (stealth), and greatly improved C4ISR. Consequently, several armed forces in the Asia-Pacific now deploy or will soon acquire several new weapons platforms, advanced armaments, or sophisticated military systems, including aircraft carriers, submarines, maritime patrol aircraft, air-to-air refueling aircraft, longer-range air-to-air missiles, and modern antiship cruise missiles. For example:

- China, India, South Korea, Malaysia, Singapore, and Taiwan have either expanded or else are in the process of expanding their blue-water navies with modern, foreign-built—or foreign-designed but locally constructed—destroyers, frigates, missile patrol boats, and diesel-electric submarines.
- Thailand has acquired a small aircraft carrier from Spain; India has recently concluded an agreement to purchase a used, refurbished, and reequipped carrier from Russia; and Japan plans to construct two flat-top “helicopter destroyers.”
- China, India, Japan, South Korea, Malaysia, and Singapore have all received or will soon acquire tanker aircraft for air-to-air refueling.
- Nearly every Asia-Pacific country currently possesses at least some fourth-generation fighter aircraft—such as the Russian Su-27, Su-30, or MiG-29; the American F-16 or F/A-18; and the French Mirage-2000—capable of firing standoff, active, radar-guided air-to-air missiles like the U.S. AMRAAM or the Russian AA-12.
- India is developing a supersonic antiship cruise missile in cooperation with Russia, while China has purchased such missiles from Russia to outfit its destroyers.
- Australia, India, Japan, and Taiwan have plans to acquire missile defenses, either in cooperation with other countries or through the purchase of off-the-shelf systems.

In particular, most Asia-Pacific militaries are greatly expanding and upgrading their C4ISR capabilities.¹⁰ China, Japan, Singapore, and Taiwan all possess airborne early warning and command aircraft, while Australia, India, and South Korea intend to acquire them in the near future. Australia, Japan, and South

Korea have or will soon have the Aegis naval sensor and combat system deployed on their largest surface combatants, while Taiwan is buying long-range early-warning radar. Nearly every major military in the region is acquiring unmanned aerial vehicles and are increasingly using space for military purposes, including satellites for surveillance, communications, and navigation/target acquisition. Several countries in the region—particularly Australia, China, Japan, Singapore, South Korea, and Taiwan—have also made or are presently making considerable investments in new types of information processing and data fusion, command and control, and the digitization of their armed forces. South Korea, for example, is developing a new tactical integrated communications system, while Taiwan is spending more than two billion dollars on a new military-wide C4ISR network that will link communications, computers, and sensors.¹¹ China is re-

Ultimately, “defense transformation” does not adequately describe current efforts by Asia-Pacific nations to upgrade and reform their militaries—“modernization-plus” is more apt.

portedly working hard to expand and improve its C4ISR and information operations/information warfare capabilities, with particular attention to creating a separate military communications network,

using fiber-optic cable, satellites, microwave relays, and long-range, high-frequency radio. Much of the hardware and technology bolstering China’s emerging C4I and information operations capability is basically dual use in nature; the military has benefited indirectly from developments and growth in the country’s commercial information-technology industry.¹² Singapore already possesses a nationwide secure C4I network, utilizing microwave and fiber-optic channels linked to air and maritime surveillance systems.¹³

The acquisition of these new military capabilities has many implications for militaries in the Asia-Pacific. At the very least, they promise to upgrade and modernize war fighting in the region significantly. Certainly, Asia-Pacific militaries are acquiring greater lethality and accuracy at greater ranges, improved battlefield knowledge and command and control, and increased operational maneuver and speed. Standoff precision-guided weapons, such as cruise and ballistic missiles and terminal-homing (such as GPS or electro-optical) guided munitions, have greatly increased combat firepower and effectiveness. The addition of modern submarines and surface combatants, amphibious assault ships, air-refueled combat aircraft, and transport aircraft have extended these militaries’ theoretical range of action. Advanced reconnaissance and surveillance platforms have considerably expanded their capacities to look out over the horizon above, below, and on the sea surface. Additionally, through increased stealth and active defenses (such as missile defense and longer-range air-to-air missiles),

local militaries are adding substantially to their survivability and operational effectiveness. Consequently, conflict in the region, should it occur, would likely be more “high-tech” than in the past—faster, longer in reach, and yet more precise and perhaps more devastating in its effect.

More important, many Asia-Pacific militaries are acquiring military equipment that, taken together, forms the kernel of what is required to transform their militaries fundamentally. In particular, those systems related to precision strike, stealth, and above all C4ISR constitute some of the key hardware ingredients essential to a modern RMA. These emerging capabilities, in turn, have real potential to affect strategy and operations on tomorrow’s battlefield and hence to alter the determinants of critical capabilities in modern warfare.

DEFENSE TRANSFORMATION IN THE ASIA-PACIFIC REGION

If Asia-Pacific militaries have been amassing much of the hardware necessary for defense transformation, “the acquisition of new technology is only the first and often the easiest step” in realizing an RMA.¹⁴ It is necessary as well, therefore, to develop the “software”—the doctrine, tactics, and organization—necessary to take full advantage of these new technologies. Accordingly, many militaries and governments in the Asia-Pacific region are studying, assessing, and even experimenting with such aspects of transformation.

Much of this speculation and experimentation has been driven by the current debate over the future transformation of the U.S. armed forces. The United States is recognized to be at the forefront, in terms of strategy, operations, and technology, when it comes to conceptualizing and implementing transformation.¹⁵ Consequently, American models of the information technology-based RMA and defense transformation have typically been the point of departure for discussion and evaluation in the Asia-Pacific.

Talking the Talk . . .

Interoperability with U.S. forces has been a key factor, driving much of the current thinking about defense transformation in the Asia-Pacific. U.S. allies and friendly nations in the region—particularly Australia, Japan, South Korea, and Taiwan—appear to be particularly keen on studying and possibly implementing transformations of their respective militaries specifically in order to remain compatible with U.S. forces, particularly as the likelihood of coalition operations with the United States—such as in Iraq or Afghanistan—is expanding. This enhanced interoperability is especially crucial for regional allies as the United States continues to transform its own armed forces, since it would permit their militaries to tie into and take advantage of American progress in transformational warfare. The Aegis combat system could enable Japanese and

South Korean ships to link with U.S. naval forces in cooperative engagements against opposing forces, or, in the case of Japan, to work with the United States in developing and deploying ship-based missile defenses. At the same time, defense transformation on the part of key U.S. allies and other friendly countries in the Asia-Pacific could greatly benefit the United States, by strengthening bilateral military alliances and burden sharing.

Australia. In 1999, having looked at the issue of defense transformation since mid-decade, the Australian Department of Defense established an Office of the Revolution in Military Affairs to review technological developments and explore strategies for implementing an Australian RMA, particularly in partnership with the United States.¹⁶ According to one report, the four key components of the Australian RMA are weapons lethality, force projection, information processing, and intelligence collection.¹⁷ In terms of practical results, Australia stresses developing and enhancing the mobility, firepower, and sustainability of the Australian Defense Forces (ADF) by expanding interservice jointness, increasing logistical support, strengthening amphibious and expeditionary capabilities, and making improvements in precision strike and in intelligence gathering, surveillance, and reconnaissance.¹⁸

In particular, the ADF places increasing emphasis on network-centric warfare as a way to gain a “knowledge edge” over potential competitors.¹⁹ The knowledge-edge concept is “the effective exploitation of information technologies to allow us to use our relatively small force to maximum effectiveness.”²⁰ NCW is intended not only to provide the ADF a force multiplier that maintains a technological edge over much larger potential adversaries (such as Indonesia) but to enhance cooperation and interoperability with U.S. forces.²¹ In this regard, Australia especially looks to leverage its limited indigenous high-technology core competencies—such as its Jindalee over-the-horizon radar network—in collaborative weapons programs with the United States.²²

China. Beijing has also been particularly influenced by the emerging IT-based RMA. China is currently engaged in a determined effort to modernize its armed forces, the People’s Liberation Army (PLA), in order to be able to fight and win “limited wars under high-tech conditions.”²³ This doctrine revolves around short-duration, high-intensity conflicts characterized by mobility, speed, and long-range attack, employing joint operations fought simultaneously throughout the entire air, land, sea, space, and electromagnetic battle space, and relying heavily upon extremely lethal, high-technology weapons. PLA operational doctrine also emphasizes preemption, surprise, and shock, given that the earliest stages of conflict may be crucial to the outcome of a war.

In this regard, many in the PLA see considerable potential for force multiplication in such areas as information warfare, digitization of the battlefield, and networked systems.²⁴ As already mentioned, China is greatly expanding its C4ISR capabilities. At the same time, it sees adversaries who are highly dependent upon advanced technology—such as the United States—as susceptible to low-tech countermeasures or attacks on their own command, control, and communications capabilities. Consequently, the PLA has devoted increasing attention to asymmetric responses that enable “the inferior to defeat the superior.”²⁵ These systems are sometimes lumped together as “assassin’s mace” or “trump card” weapons.²⁶ Some assassin’s-mace weapons would be used against an enemy’s vulnerabilities, as in computer-network attacks. Information warfare is a potentially critical new development in the PLA’s war-fighting capabilities. The PLA is reportedly experimenting with information-warfare operations, and it has established special units to carry out attacks on enemy computer networks in order to blind and disrupt an adversary’s C4I systems.²⁷

Other assassin’s-mace weapons are existing systems, development or deployment of which have been accelerated because they have proved to be among the most effective weapons in the PLA’s arsenal. This category of weapons particularly includes tactical ballistic missile systems—such as the six-hundred-kilometer-range CSS-6 and three-hundred-kilometer CSS-7 missiles—which are being fitted with satellite-navigation guidance for improved accuracy and with new types of warheads (such as cluster submunitions and fuel-air explosives) for higher lethality. Finally, there are the so-called new-concept arms, such as kinetic-energy weapons (such as railguns), lasers, radiofrequency and high-powered microwave weapons, and antisatellite systems.²⁸

India. The 1991 Gulf War led India to pay closer attention to the promise and challenges of the emerging IT-based RMA. Many Indians have become increasingly concerned about growing American technological prowess and the near-global dominance of the United States as a conventional military power. Some Indians have called for corresponding, if perhaps asymmetric, capabilities to deal with this new military-technological reality.²⁹ This response holds that India must in particular exploit the emerging information revolution in warfare if it wants to be taken seriously as a regional and global power, to have a “fighting chance in future conflicts.”³⁰ India’s rapidly growing information-technology sector is seen as potentially critical in this effort.³¹

Japan. Japanese interest in defense transformation is largely rooted in the 1998 North Korean Taepo Dong missile test, which alerted Tokyo to the need to reform and reorient its Self-Defense Forces to new threats, particularly ballistic missiles and the proliferation of weapons of mass destruction.³² Other concerns

driving Japan's interest in transformation include the possibility of cyber attacks on its national information infrastructure, the likely expansion of involvement in international military operations (such as in Iraq), and increased military co-operation with the United States in regional security undertakings (such as the Proliferation Security Initiative).³³ At the same time, the Japanese must cope with severe fiscal constraints and a political need to keep casualties low in the event of conflict.³⁴

The Japan Defense Agency (JDA) has designated its transformational concept the "Info-RMA." This Info-RMA is based on the premise that future warfare will be characterized by a huge leap in battlespace awareness, precision-strike engagement, coordinated attack by small, widely dispersed units, the heavy use of cyberspace and unmanned battlefield systems, expansion of the operational theater and increased speed, and a move away from attrition to "decisive" (also called "effects based") warfare. The Info-RMA, which according to the JDA is based on "the application of advanced information technologies to the military sphere," entails information sharing through the creation of an all-inclusive C4ISR network, greater jointness and speed (particularly in command and control), increased combat efficiency and effectiveness, greater organizational flexibility, protection of critical information systems (such as command and control nodes), and expanded interoperability with U.S. forces. The objective of the Info-RMA is "a quantum leap in the efficient achievement of military objectives."³⁵

Many of the principles of the Info-RMA can be found in the Self-Defense Forces' future defense capabilities requirements. In particular, the JDA's 2003 defense posture review calls for a joint information-sharing network for ground, sea, and air self-defense forces, a "technology oriented," rather than "scale oriented," force structure (i.e., using technology as a force multiplier), and

New military capabilities of the Asia-Pacific militaries, at the very least, promise to upgrade and modernize war fighting in the region significantly.

interoperability with the United States through modernization and digitization.³⁶ In addition, Japan plans to increase greatly its missile defense initiatives, in part by upgrading its naval Aegis sys-

tems to defend against missile attacks and by expanding cooperation with the United States on joint missile defense research and development. In fact, missile defense could become a catalyst for defense transformation in Japan, as it could effect critical policy changes (such as amendment of Article 9 of the constitution to permit expanded U.S.-Japan cooperation in collective self-defense), promote the acquisition of a joint C4ISR network, and help reform Japan's defense research, development, and industrial infrastructure.³⁷

Singapore. Interest in defense transformation in Singapore stems both from strategic weaknesses—lack of strategic depth, a small and aging population, and relatively limited defense resources—and economic and technological advantages, particularly a highly educated workforce and strong information technologies. Singapore’s Ministry of Defense sees information technologies as critical, perhaps decisive, in future conflict. The IT-based RMA will

change the nature of warfare. Superior numbers in platforms . . . will become less of an advantage unless all these platforms can be integrated into a unified, flexible, and effective fighting system using advanced information technologies. At the same time, the ever-increasing reliance upon information technology means that protecting one’s own information systems and disrupting the enemy’s will become a major aspect of warfare.³⁸

Accordingly, Singaporean transformational efforts—referred to collectively as “Integrated Knowledge-Based Command and Control” (IKC2) doctrine—emphasize the acquisition, development, and integration of technologies for command and control with intelligence, surveillance, and reconnaissance systems and with precision-guided weapons.³⁹ RMA-related areas currently receiving particular focus include advanced electronics and signal processing, information systems security, advanced guidance systems, communications, electronic warfare, sensors, and unmanned vehicles.⁴⁰ Two new agencies—the Future Systems Directorate and Center for Military Experimentation—have been established to help implement IKC2 in Singapore.

South Korea and Taiwan. The Republic of Korea (ROK) armed forces are aware that future warfare will be quite different from today, that “it will be nonlinear, small-scale, nonconcentrative, and far-separated.”⁴¹ Consequently, they acknowledge that future forces will need improved C4ISR, including networked platforms, unmanned systems, and real-time command and control, as well as enhanced capacities for precision strike. Additionally, the ROK-U.S. alliance is undergoing a shift, with South Korea expected to play a larger role in its own defense; Seoul is exploring ways in which it can become more self-reliant (particularly in early warning, intelligence, and surveillance) but remain interoperable with U.S. forces.⁴² Nevertheless, it is generally agreed that the Korean RMA is still very much in its early stages.⁴³

Taiwan’s revolution in military affairs is largely predicated on Chinese threat scenarios and accordingly is very much influenced by Chinese thinking about the RMA.⁴⁴ Not surprisingly, Taipei is focused on defending against missile strikes and securing its command and control network from attacks by the PLA, while engaging in offensive information warfare against China. Elements of its approach include early warning systems, reconnaissance capabilities, and

an integrated and secure command and control system, along with antimissile interceptors and possibly retaliatory ballistic missile systems.⁴⁵

In their efforts to implement RMAs, Seoul and Taipei are aided by large and growing information-technology sectors. South Korea and Taiwan are both extensively “wired” in terms of cable and cellular systems, Internet use, and electronics industries.⁴⁶ In particular, they possess sizable manufacturing bases in the fields of computers and telecommunications; together they dominate the global production of dynamic random-access memory semiconductor chips.

. . . But Not Walking the Walk

Notwithstanding all the discussion, debate, and evaluation regarding the value and effectiveness of the information technology-based revolution, most Asia-Pacific countries have made little actual progress in transforming their militaries. In particular, there has been little implementation of the organizational, institutional, and doctrinal change that would be needed. Few militaries in the region have moved beyond the initial “speculation” phase of defense transformation, and even fewer are testing new organizations or new methods of warfare, or specifically developing strategies for transforming their armed forces, or directing resources toward this end. An observation made about recent European transformational activities is equally apropos to the Asia-Pacific, that they “have been more about producing PowerPoint slide shows than building demonstrators or pursuing field experimentation.”⁴⁷ Even of those that have done so, none has yet revised its doctrine or fielded reorganized force structures in line with transformational concepts of the IT-based RMA.⁴⁸ In some countries—particularly India, Japan, and South Korea—even the debate is still rather thin and theoretical; any tangible movement toward transformation would appear to be far off.

Even in the case of China—whose “efforts to exploit the emerging RMA arguably are the most focused” of any country in the Asia-Pacific—there is still considerable disagreement as to the significance and potential military effectiveness of PLA force modernization over the past decade.⁴⁹ Certainly, the PLA has made considerable progress over the past decade in adding new weapons to its arsenal, and China has noticeably improved its military capabilities in several specific areas, particularly missile attack, air and naval platforms, and information warfare. In addition, the PLA is reportedly experimenting with digitization and RMA-type campaign tactics.⁵⁰ Nevertheless, the PLA continues to suffer from substantial deficiencies and weaknesses that limit its ability to constitute a modern, transformed military force, and its pace of reform and change has been slow.⁵¹ “Not all military leaders embrace RMA ideas”;⁵² consequently the PLA remains overwhelmingly a ground-based army, composed largely of infantry and oriented

toward linear, attrition-based “People’s War.” Much of its weaponry is still of 1960s- and 1970s-era vintage. In particular, the PLA still lacks the logistical and lift capacity—either by sea or by air—for projecting force much beyond its borders.⁵³ Finally, China’s capabilities in the area of C4I architectures, information warfare, and surveillance and reconnaissance are still very much in the early stages of research, development, and deployment. Consequently, China has a long way to go in terms of defense transformation and of acquiring and applying the state of the art.⁵⁴

Ultimately, “defense transformation” does not adequately describe current efforts by Asia-Pacific nations to upgrade and reform their militaries. If defense transformation entails a fundamental and disruptive change in the concept, character, and conduct of war fighting, then most Asia-Pacific nations are engaged not so much in transforming as in basically modernizing their armed forces—that is, adding new capabilities and new capacities for warfare but without necessarily altering their fundamental modes of warfare. “Modernization-plus,” therefore, is perhaps a more apt descriptor of what is currently transpiring in most Asia-Pacific militaries. Many militaries in the region, by buying new types of precision-guided munitions, airborne early warning aircraft, submarines, air-to-air refueling aircraft, data links, and improved command and control systems, are certainly acquiring capabilities that they did not possess earlier, such as new capacities for force projection and standoff attack, low observability, and greatly improved C4ISR. Nevertheless, this modernization-plus effort is in general evolutionary, steady state, and incremental, and the innovation seen here is less a disruptive than a *sustaining* process.⁵⁵

IMPEDIMENTS TO DEFENSE TRANSFORMATION IN THE ASIA-PACIFIC

Several factors currently inhibit defense transformation among the Asia-Pacific militaries. The first comprises costs and resource constraints: transformation, it turns out, doesn’t come cheap, despite assertions made early on by some proponents that the exploitation of commercial off-the-shelf (COTS) technologies would greatly reduce costs.⁵⁶ Rather, even to make a start requires the acquisition of many new and expensive types of military-unique systems. Even many dual-use COTS information and communications technologies are not easily (or cheaply) adapted to military use, as they often require substantial modification, such as ruggedization or additional capabilities.⁵⁷

At the same time, funding for transformational systems must generally compete with large and expensive “legacy” programs—such as fighter aircraft, tanks, and large warships, as well as huge manpower costs usually associated with sizable ground forces.⁵⁸ In fact, in the case of most Asia-Pacific militaries,

such legacy spending continues to siphon off money that could pay for transformational systems.⁵⁹

Ironically, defense transformation is lagging in the Asia-Pacific despite the fact that most countries in the region have actually increased defense spending over the past decade. Military expenditures in the Asia-Pacific market grew by nearly 27 percent in real terms over the past decade, and an extra \$126 billion was added to regional defense budgets between 1992 and 2002. India's defense budget has doubled since the early 1990s, for example, while Chinese military expenditures have increased more than threefold in just the past seven years (1997–2004).⁶⁰ Even the Asian financial crisis of 1997 appears to have only temporarily dampened regional military expenditures; nearly every major country in the Asia-Pacific had by 2002 sufficiently recovered to raise their defense budgets above 1992 levels.

Nevertheless, even these rising military expenditures may not be sufficient to fund both legacy and transformational systems or to acquire new systems in sufficient quantities so as to be transformational in their effects. Many Asia-Pacific countries—such as India and South Korea—still spend less than twenty billion dollars on defense, and most—including Australia, Singapore, and Taiwan—spend less than ten billion.⁶¹ In the case of Japan—perhaps the only country in the region with the indigenous technological and industrial capabilities for exploiting the IT-based RMA for transformation—defense budgets have been stagnant for years.⁶² Only China has been able to maintain substantial and sustained increases in military spending over the past decade.

In some cases, military expenditures are expected to rise over the next few years. South Korea, for example, plans to invest more than twenty-eight billion dollars in modernizing its armed forces over the 2004–2008 time frame. Taiwan intends to spend an additional fifteen billion dollars over the next decade on new military equipment, including eight diesel-electric submarines and an anti-ballistic missile system. It is probably too soon to tell, however, how much of this extra money will underwrite transformation.

Second, the organizational and institutional cultures found in most Asia-Pacific militaries impede transformation. Militaries in the Asia-Pacific are often extremely conservative, risk-averse, and highly bureaucratic organizations. Of course, large organizations anywhere, certainly militaries and defense ministries, are typically resistant to change—especially disruptive change, since it can threaten the stability of normal day-to-day operations, standard operating procedures, war plans, and even career paths. Armed forces are especially hierarchical, with heavily top-down command-and-control structures.⁶³ In the Asia-Pacific, however, the conservative and hierarchical nature of military organizations is often compounded by Confucian principles of harmony, seniority

over merit, respect for elders (age is often synonymous with rank or leadership), and concern with face. Consequently, local militaries may be resistant or even hostile to the disruptive, leveling, and decentralizing nature of transformation and the information technology–based revolution in military affairs.⁶⁴

Another implication of the decidedly conservative nature of regional defense establishments is a characteristic preference for traditional systems. Local militaries often prize large and conspicuous weapons platforms—such as main battle tanks, modern fighter aircraft, and aircraft carriers—more than less visually striking but transformational systems, such as UAVs, C4I networks, and precision-guided munitions. In addition, high-ranking military officials seeking to advance their careers have tended to prefer immediate, high-profile hardware acquisitions over longer-term software fixes.⁶⁵ Finally, ground forces predominate many Asia-Pacific militaries (this is particularly evident in China, India, South Korea, and Taiwan), marking their entire defense establishments with their penchants for mechanized armor, large ground forces, and force-on-force warfare.⁶⁶

In many cases too this conservative and risk-averse behavior is exacerbated by “old boy” networks in defense decision making. Throughout the Asia-Pacific, critical decisions and policies pertaining to national security—particularly arms procurement, doctrine, and force structure—are commonly made by small, insular groups of military officers, career civilian defense officials, defense industry representatives, and private advisers (many of whom are ex-military men or former bureaucrats, a pattern known in Japan as *amakudari*, or literally “descent from heaven”).⁶⁷ This insularity—often coupled with corruption and bribery—reinforces a “business as usual” approach, limits linkages to centers of innovation in the commercial and business worlds, and thereby makes it harder to implement transformation.⁶⁸

Many militaries in the region also lack any tradition of joint operations and instead possess strong single-service cultures and severe interservice rivalries. In such a state of affairs it is doubly difficult to introduce ideas of jointness, interoperability, and combined-arms operations as basic war-fighting concepts, or to create common C4ISR and logistical support systems.⁶⁹

Third, most defense technology and industrial bases in the Asia-Pacific are ill equipped to contribute much to defense transformation. Most regional defense research, development, and industrial bases—even in Japan—lack the design skills, technological expertise, or links to advanced commercial technology sectors (particularly local IT industries) needed to develop and manufacture transformational systems.⁷⁰ In particular, these countries’ defense industries do not possess sufficiently advanced systems-integration capabilities to link together highly complex systems of systems, such as C4ISR networks. Most of these firms

are simply not set up to function as “lead systems integrators”—such as a Lockheed Martin or a BAE Systems—building and leading large teams of disparate subcontractors in a systematic program to design, develop, and manufacture a system to customer specifications.⁷¹ Defense industries in the region tend to be primarily “metal bashers” as opposed to innovators; local arms manufacturing typically involves production either under license or of relatively simple indigenous systems, such as artillery pieces or small arms. In addition, heavy emphasis in most of these countries on self-reliance in arms production means that resources are often wasted on duplicating the development and manufacture of weapons systems already widely available on the global arms market.⁷² Local arms manufacturers push their governments to buy systems they are already capable of producing or that offer prestige and global presence—again, mostly legacy systems, such as fighter aircraft or large surface combatants—rather than potentially transformational ones, such as advanced precision-guided weapons and joint, networked C4ISR infrastructures.

Should a country choose to acquire transformational systems, it will likely have to buy them off the shelf from foreign suppliers (particularly the United States) or develop them collaboratively with foreign partners (again, the United States). Such programs will have to compete with locally built systems, around which strong political lobbies often cluster, both for the sake of jobs and in order to preserve so-called strategic industries.

Fourth, militaries and defense industries in the Asia-Pacific region have few strong linkages to innovative local industries, such as the information technology sector, limiting the potential for “spin-on”—that is, from commercial to military. Most regional arms industries are state owned and insulated from both market forces and the private sector. This demarcation, however, makes it more difficult for the defense sector to benefit from cross-fertilization with commercial technologies, as well as making it harder and less attractive for civilian industries to participate in military research, development, and manufacturing.⁷³ At the same time, local militaries in general remain distrustful of commercial off-the-shelf technologies and prefer “mil-spec’ed” equipment.⁷⁴

Fifth, the capabilities of local commercial high-technology industries—particularly local IT firms—may be overrated and actually of little use to defense transformation. While many Asia-Pacific countries boast sizable information-technology sectors, the emphasis has largely been on production engineering, not innovative research and development. The science and technology bases of most countries in the region are still weak; like local arms manufacturers, they particularly lack the necessary systems-integration skills to adapt and incorporate commercial technologies in military systems. Hence, with the exception of Japan, most regional IT production has been at the decidedly low end of the

technology spectrum.⁷⁵ Most of Taiwan's and China's IT industries are still oriented toward production and assembly according to original-equipment-manufacturer specifications, for example, rather than indigenous design and manufacturing.⁷⁶ Huawei and ZTE, two of China's much-vaunted telecommunications vendors (the former has indirect ties to the PLA), have prospered by occupying generally the low end of the telecoms sector—producing basic cable and wireless systems—keeping prices and production costs low, and selling to the developing world.⁷⁷ Even India's software industry is still largely geared toward delivering highly specialized programs according to strict customer specifications or toward the “grunt work” of the global IT industry (such as debugging Y2K software or handling technical-support calls).⁷⁸

As previously noted, South Korea and Taiwan are the world's leaders in the design and manufacture of memory chips, but this is in effect the exception that proves the rule. Dynamic random-access memory chips have practically become

Defense transformation is much more than the “mere” modernization of one's armed forces.

a commodity product, and their manufacture is increasingly being sent offshore to countries where production costs can be kept low (such as China, which is becoming

an important producer—again, to original-manufacturer specifications—of semiconductors). At the same time, much of the technology found in South Korea's and Taiwan's semiconductor industry does not seem to be making its way into military systems; even locally produced defense electronic systems rely heavily on imported designs and components.⁷⁹

Consequently, exploitation of dual-use technologies for defense transformation is unlikely to occur to any large degree in the Asia-Pacific. While nearly all countries in the region see the great promise of advanced commercial technologies for military uses—particularly information technologies or space—few have made actual, deliberate, and concerted efforts to engage in such spin-on. Most exploitation of dual-use technologies in the region has so far been serendipitous and modular—that is, simply “piggybacking” on existing or emerging commercial systems (such as nationwide fiber-optic telecommunications networks) rather than adapting commercial technologies to military purposes.⁸⁰ Even then, dual-use efforts have not always found success, as witnessed by Japan's recent setbacks in its space program.⁸¹

Finally, certain Asia-Pacific militaries face country-specific impediments to defense transformation. Japan, for example, is still greatly constrained by its constitution, which bars the country from possessing an offensive armed force; this restriction could be interpreted as applying to transformation.⁸² For its part, India, given the likely threats it perceives from Pakistan and China, appears to be

more interested in acquiring an effective nuclear strike capability than in engaging in an IT-based RMA.⁸³

WHERE IS THE ENDGAME?

It may be premature or even irrelevant to talk about defense transformation in the context of the Asia-Pacific militaries. Most countries in the region—despite their best efforts—are unlikely to transform their militaries to the extent made possible by the information revolution and the emerging revolution in military affairs, at least not any time soon. There are simply too many factors hindering or impeding the ability of even the most technologically advanced or motivated militaries in the Asia-Pacific—including Australia, China, India, Japan, South Korea, Taiwan, and Singapore—to move beyond modernization-plus. These factors particularly include budgetary constraints; cultural, organizational, and bureaucratic resistance; the effect of legacy systems and preexisting procurement commitments; weaknesses in national defense technology and industrial bases; and underappreciation of the complexity of adapting commercial dual-use technologies to military purposes. Overall, defense transformation may simply be too disruptive and too threatening to military and civilian elites, too expensive, and technologically too demanding.

Of course, it is easy to criticize. Change—especially radical change inherent in the RMA—is always hard, and it is human nature to be suspicious of and hostile toward the unknown. It should not be surprising to see so much organizational, institutional, and cultural resistance to the idea of transformation. Even in the United States and Europe there still exist considerable skepticism and foot-dragging with regard to defense transformation.⁸⁴ Moreover, transformation as a concept suffers from the fact that it is basically an open-ended, continuous process—since there will always arise new technological innovations that can affect the character and conduct of warfare, and therefore military doctrine and organization, where is the endgame? When does a military decide that it has finally and successfully transformed itself? In point of fact it never can, and so to fault a country for being at “only” a certain level of transformational capability or for making “only” a certain degree of progress toward implementing a revolution in military affairs is perhaps unfair.

As a leading scholar has succinctly noted, “hardware may be easily acquired but the accompanying software (e.g., doctrine, tactics, organizational form, and macrosocial change) [of defense transformation] is far more difficult to develop and implement.”⁸⁵ At the same time, however, transformation along the lines of the U.S. model may not be necessary to “get the job done.” A modernization-plus strategy—that is, evolutionary and sustaining innovation—alone may be sufficient to meet most of these countries’ defense requirements, particularly

with respect to their strategic context (that is, their immediate threat perceptions and defense requirements) and their available resources. These countries do not need to emulate the American transformation paradigm in order to derive valuable new capabilities and other benefits from their current modernization efforts—a partial solution could be, if not revolutionary, more than adequate. In particular, even overlaying a more capable C4ISR infrastructure on existing forces could greatly improve these militaries' fighting effectiveness.

In addition, it may be enough for friends and allies of the United States in the region to modernize sufficiently for greater interoperability with U.S. forces—especially with respect to network-centric warfare—rather than attempt to acquire a complete set of transformational systems, in order to fill important niches in coalition operations. For example, it would be mutually beneficial were these countries able to cooperate with the United States on missile defenses, such as establishing joint capabilities for early warning and cooperative engagement in order to bring both U.S. forces and friendly nations under a single defensive shield. In addition, missile defenses, particularly if implemented collaboratively, could catalyze the development and deployment of advanced (and shared) C4ISR infrastructures.

On the other hand, simply settling for modernization-plus could mean that Asia-Pacific militaries—especially those friends and allies of the United States—will be unable to take full advantage of the potential and synergy of the advanced systems they are currently acquiring. A particularly pertinent criticism made of American efforts in 2003 to fight a network-enabled war in Iraq was that it “fatally grafted” advanced sensors and communications onto “old-fashioned command and control systems.” Intelligence had to go up and then down the chain of command, resulting in delays and “magnification of individual communications failures.”⁸⁶ Such glitches could only be worse for countries that are even less prepared than the United States to exploit NCW.

In addition, should a country not transform its forces, what recourse might it have against adversaries who do? In such a case, a country might pursue offsetting asymmetric responses, such as WMD capabilities (along with their delivery systems, such as ballistic missiles) or low-intensity insurgency and guerrilla tactics; either could result in new threats undermining regional stability. Finally, the ability of nontransformed countries to participate in joint campaigns with the United States or operate with American military forces could be greatly limited. Many of these countries (along with America's allies in Europe and North America, by the way) are already worried about a growing capabilities gap with respect to U.S. forces and how it might affect future joint operations and, in turn, their national security.⁸⁷ Failure to keep pace with U.S. transformation

could only widen this gap and reduce these countries to “tool box” status, playing only minor roles in coalition operations.

At the same time, the prophets and advocates of defense transformation need to do a better job of translating their broad, abstract visions into tangible and practical realities. What, for example, does network-centric warfare demand in terms of both hardware and software? What do we mean, operationally speaking, by jointness, interoperability, and networking? For that matter, what do we mean by “disruptive” innovation, and how do we know when we have truly arrived at a “paradigm shift” that “fundamentally alters” the character and conduct of warfare? If these questions cannot be answered in ways that are meaningful to war planners, defense transformation will remain an empty concept.

The issue of defense transformation in the Asia-Pacific region will likely remain a legitimate subject for discussion and debate for some time to come. In particular, transformation will continue to be a contentious issue, as it is increasingly linked to a number of already critical regional security concerns, including alliance relationships and interoperability, regional competition and cooperation, arms sales and arms procurement, civil-military relations, internal security and stability, and the impact of technology and economic development on comparative advantage. Despite the many challenges of implementation, therefore, the enormous potential and promise of transformation will continue to drive regional militaries to explore and experiment with concepts of the emerging revolution in military affairs.

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MARITIME TERRORISM IN SOUTHEAST ASIA

The Abu Sayyaf Threat

Rommel C. Banlaoi

Southeast Asia is fast becoming the world's maritime terrorism hot spot, because of a very high incidence of piracy and a burgeoning threat of terrorism. Southeast Asia is the region most prone to acts of piracy, accounting for around 50 percent of all attacks worldwide. This situation is aggravated by indigenous terrorist groups with strong maritime traditions. The growing nexus between piracy and terrorism makes maritime terrorism in Southeast Asia a regional security concern.

The Abu Sayyaf Group (ASG), the Moro Islamic Liberation Front (MILF), the Gerakan Aceh Merdeka (GAM), and the Jemaah Islamiyah (JI) are three terrorist groups in Southeast Asia with the intention and proven capability to wage maritime terrorism. Of these groups, Abu Sayyaf is the best known but least understood.¹

This article addresses the threat of maritime terrorism in Southeast Asia, with emphasis on the ASG—its organizational structure, membership, and strategy, and its implications for maritime security in Southeast Asia.

THE NEXUS BETWEEN PIRACY AND TERRORISM

The International Maritime Bureau (IMB) reported in 2003 that out of 445 actual and attempted pirate attacks on merchant ships, 189 attacks occurred in Southeast Asian waters, 121 of them in the Indonesian Archipelago and thirty-five around Malaysia and Singapore, particularly in the congested Strait of Malacca.² The 2003 figure represented an increase of thirty-three attacks in the region over the preceding year. Pirate attacks in Southeast Asian waters were much more frequent than in Africa or Latin America. In 2004, the IMB reported that pirate attacks dropped to 325, but Southeast Asia continued to top the list.

Out of the total pirate attacks worldwide in 2004, the IMB recorded ninety-three in Indonesian waters alone. A worrisome IMB report states that pirates preying on shipping were more violent than ever in 2004, murdering a total of thirty crew members, compared with twenty-one in 2003.³

Because piracy is frequent in Southeast Asia, terrorists have found it an attractive cover for maritime terrorism. Though the motives of pirates and terrorists are different (the former pursues economic gains while the latter advances political objectives),⁴ terrorists could adopt pirate tactics of stealing a ship, which they could then blow up or ram into another vessel or a port facility, to sow fear. Thus, security experts consider the line between piracy and terrorism to have blurred in Southeast Asia: "Not only do pirates terrorize ships' crews, but terror groups like al-Qaeda could also use pirates' methods either to attack ships, or to seize ships to use in terror attacks at megaports, much like the Sept. 11 hijackers used planes."⁵ A more sinister scenario is that a small but lethal biological weapon could be smuggled into a harbor aboard ship and released.⁶ Terrorist groups regard seaports and international cruise lines as attractive targets, because they lie in the intersection of terrorist intent, capability, and opportunity.⁷

The growth of commercial shipping in Southeast Asia makes the challenge of piracy and maritime terrorism in the region alarming. Since 1999 the U.S. Coast Guard Intelligence Coordinating Center has forecast that world commercial shipping will increase enormously by 2020 and that this will trigger the proliferation of transnational crime and terrorism at sea.⁸ It has also forecast that growth in the cruise-line industry and the emergence of high-speed ferries will be key developments in the maritime passenger transport business through 2020.⁹

Shipping has long been the major form of transport connecting Southeast Asia to the rest of the world.¹⁰ Four of the world's busiest shipping routes are in Southeast Asia: the Malacca, Sunda, Lombok, and Makassar straits.¹¹ Every year more than 50 percent of the world's annual merchant fleet tonnage transits these straits, and more than 15 percent of the value of world trade passes through Southeast Asia.¹² These figures are projected to grow unless major disasters occur in the region.

The Malacca Strait alone carries more than a quarter of the world's maritime trade each year—more than fifty thousand large ships pass, including forty to fifty tankers.¹³ Because the strait is the maritime gateway between the Indian Ocean and the Pacific Ocean, it will remain a world center of maritime activity. It has been argued that it would be difficult for terrorists to disrupt shipping in the strait by sinking a ship in a precise spot.¹⁴ However, were terrorists to hijack one and turn it to a floating bomb to destroy ports or oil refineries, the effect

would be catastrophic. Such an attack incident would not only cripple world trade and slow down international shipping but spread fear—more broadly than on 9/11. The prospect of such a maritime incident is not remote. Container shipping is highly vulnerable, and the possibility of its use as a weapon of mass destruction has been documented.¹⁵ Thus, maritime terrorism in Southeast Asia must prudently be considered no longer a question of if, but rather of when and where.¹⁶ One maritime security analyst goes farther—that maritime terrorism in Southeast Asia is not even a question of when but of how often and what we are going to do about it.¹⁷

Maritime terrorism in Southeast Asia is all the more serious a regional security concern because al-Qa‘ida and its operatives have a keen awareness of maritime trade and understand its significance to the global economy.¹⁸ Al-Qa‘ida knows the impact of maritime terrorist attacks on shipping and has therefore planned to carry out acts of maritime terrorism.¹⁹

Al-Qa‘ida’s capability to do so has already been demonstrated by suicide attacks on the destroyer USS *Cole* (DDG 67) in 2000 and the French tanker *Limburg* in 2002. Fifteen cargo ships are believed to be owned by al-Qa‘ida, which could use them for terrorist attacks.²⁰ Al-Qa‘ida operatives are also being trained in diving, with a view to attacking ships from below.²¹

Southeast Asia has already experienced maritime terrorism. In the Strait of Malacca, for example, Aegis Defense Services, a London-based security organization, has reported that the robbery of a chemical tanker, the *Dewi Madrim*, appeared to be the work of terrorists “who were learning how to steer a ship, in preparation for a future attack at sea.”²² In Singapore, intelligence and law enforcement forces have uncovered a Jemaah Islamiyah plot to bomb the U.S. naval facility there. The sinister linking of terrorists and pirates has made Southeast Asia a focal point of maritime fear.²³ It is for this reason that the Singapore home affairs minister, Wong Kan Seng, declared in 2003 that pirates roaming the waters of Southeast Asia should be regarded as outright terrorists.²⁴ In an interview, the minister argued, “Although we talk about piracy or anti-piracy, if there’s a crime conducted at sea sometimes we do not know whether it’s pirates or terrorists who occupy the ship so we have to treat them all alike.”²⁵

ABU SAYYAF AND MARITIME TERRORISM

One terrorist group that has developed a capability to wage maritime terrorism in Southeast Asia is the Abu Sayyaf Group. Various analysts have already discussed its historical and financial ties with al-Qa‘ida.²⁶ Yet little is known about its organizational structure, strategy, tactics, or maritime terrorist capabilities.

The Early Years and Historical Roots

Originally called Mujahideen Commando Freedom Fighters (MCFF), Abu Sayyaf was organized in the Philippines as an underground militant Muslim group in the early 1990s by the late Ustadz Abdurajak Janjalani, who was recognized as its overall “amir.”²⁷ Janjalani founded the ASG in the context of a global and regional Islamic resurgence.²⁸ A veteran of the Afghan-Soviet war, Janjalani had developed a close friendship with Osama Bin Laden and Ramzi Yousef in the early 1980s while in Peshawar, Pakistan. Yousef was the mastermind of the “Bojinka plot” to bomb eleven American jetliners and to assassinate Pope John Paul II during a visit to Manila in 1995. Through Janjalani, Yousef was able to establish an al-Qa’ida terrorist cell in the Philippines.²⁹

Janjalani, however, was no mere Muslim fighter or mujahideen; he was a charismatic and a serious Muslim scholar. Born on the Philippine island of Basilan (see map), today an ASG stronghold, Janjalani (ironically) attended high school in the Catholic-run Claret College in the Basilan capital, Isabela. Though he did not finish high school, he obtained a scholarship from the government of Saudi Arabia to the Ummu I-Qura in Mecca, where he studied Islamic jurisprudence for three years.³⁰ Later he studied Islamic revolution in Pakistan, becoming attracted to the concept of *jihad*.

In 1984, Janjalani went back to Basilan and became an avid preacher, if to limited audiences, in the Santa Barbara madrassa in Zamboanga City. His various theological statements and public proclamations revealed a deep grasp of Islam, particularly Wahhabi theology, which considers other Muslim communities heretical. Janjalani delivered at least eight discourses, or *khutbah*, within a radical framework based on the Quranic concept of *jihad fi-sabil-lillah* (fighting and dying for the cause of Islam).³¹ His discourses indicted both Muslims, even mullahs, and non-Muslims for superficial knowledge of the Quran and the Hadith (the collected tradition of Muhammad and his sayings). One of his discourses vehemently condemned the Philippine constitution as a guide for Philippine society and asserted the Quran “as the only worthy guide for human life since it is perfect creation of Allah who cannot err and who knows everything.”³² He lamented the sufferings of Muslim Filipinos as victims of oppression, injustice, and lack of development, urging them to fight and die for Islam, thus to deserve “paradise as martyrs.”³³

After his brief preaching stint in Zamboanga City, Janjalani organized a movement he called the Juma’a Abu Sayyaf, rendered in English as the Abu Sayyaf Group. The name has been mistranslated as “bearer of the sword”; it actually means “Father of the Swordsman,” in reference to, and in honor of, the Afghan resistance leader Abdul Rasul Sayyaf.³⁴ The main objective of the ASG



was to establish an independent theocratic Islamic state in the southern Philippines.

The struggle of ASG, like those of other Muslim radical groups in the Philippines, is deeply rooted in indigenous sociocultural, political, economic, and historical factors that can be traced to the fourteenth century.³⁵ In that century, seafaring Muslim traders and teachers from Indonesia and other neighboring nations reached the largely pagan Philippine Islands, spreading Islam on Mindanao and Luzon. In 1521, however, the islands were colonized for Spain by

Magellan, and the new occupiers prevented the further spread of Islam. Muslim leaders resisted the Spanish from the beginning; Filipino Muslims fought Spanish, American, and Japanese colonialism for almost four hundred years, and when the Philippines gained its independence in 1946, they continued their struggle against what they call “Imperial Manila.”³⁶ Filipino Muslims, then, have nurtured a sense of separatism for nearly as long as Islam has existed in the Philippines.³⁷

Janjalani recruited to his new movement followers from Basilan, Sulu, Tawi-Tawi, Zamboanga City, and General Santos City. Most were disgruntled former members of the Moro National Liberation Front (MNLF) or the Moro Islamic Liberation Front (MILF).

During its formative period, the ASG lacked adequate funds to advance its program. Abu Sayyaf solicited foreign funding, using the name Al Haratatul-Islamiya, (“Islamic movement”).³⁸ Abu Sayyaf also engaged in kidnapping for ransom to raise funds. One of its prominent victims was Ricardo Tong, a shipyard owner, who was released on 17 January 1994 after paying a five-million-peso ransom. The ASG also conducted various extortion activities to generate funding.³⁹

Structure and Membership

Janjalani envisioned a highly organized, systematic, and disciplined organization of fanatical secessionist Islamic fighters.⁴⁰ Toward this end he formed and chaired the Islamic Executive Council (IEC), composed of fifteen “amirs,” heads of armed groups, as the main planning and execution body. Under the IEC were two special committees. The first committee was the Jamiatul Al-Islamia Revolutionary Tabligh Group, in charge of fund-raising and Islamic education; the second was the Al-Misuaratt Khutbah Committee, in charge of agitation and propaganda.

The ASG also formed a military arm, the Mujahidden Al-Sharifullah, composed predominantly of former members of the Moro National and Moro Islamic liberation fronts. This military arm had three main units: the Demolition Team, the Mobile Force Team, and the Campaign Propaganda Team. The Demolition Team, composed mostly of trained fighters, could manufacture its own mines and explosives. The Mobile Force Team—its members mostly affiliates of radio clubs, traders, businessmen, shippers, and professionals—was in charge of collaboration and coordination. The Campaign Propaganda Team—professionals, students, and businessmen—gathered information necessary to the mission of the Mujahidden Al-Sharifullah.

Though the fact is not widely known, the first mission of the group was a maritime operation, the bombing of a foreign missionary ship, the motor vessel

Doulous, on 10 August 1991 in Zamboanga City. The attack killed two Christian missionaries. The M/V *Doulous* bombing was a watershed event demonstrating the maritime terrorist capability of the Abu Sayyaf.

But its original organizational setup was short-lived. When the Philippine National Police and armed forces killed Janjalani in a bloody encounter in December 1998 in Lamitan, Basilan, Abu Sayyaf suffered a severe leadership vacuum, leading to the disaffection of some of its members. The organization set up by Janjalani crumbled rapidly; in particular, the IEC, once headed by Janjalani, died with him. The remaining leaders appointed Janjalani's younger brother, Khadaffi Janjalani, as his successor, but Abu Sayyaf had lost its organizational and theological cohesiveness. Most of its members resorted to banditry, piracy, and kidnapping for ransom.

The group became, and has remained, factionalized. At present, there are two major factions of the ASG operating independently in two major areas in the southern Philippines, the islands of Basilan and Sulu. Khadaffi Janjalani heads the Basilan-based faction, while Galib Andang, otherwise known as "Commander Robot," led the group on Sulu. Philippine law enforcement authorities captured Commander Robot in December 2003. He was killed in a bloody jail-break attempt in March 2005. Other intelligence reports mention another faction operating in Zamboanga City, with Hadji Razpal as the head. But Radzpal has been identified by some intelligence sources as one of the leaders of the Sulu-based faction.

The Basilan ASG had seventy-three members as of 2002, with ten different leaders heading their own independent groups.⁴¹ Its hard-liners comprised thirty personal followers of Khadaffi Janjalani, thirty followers of Isnillon Hapilon, and thirteen of Abu Sabaya. The group led by Hapilon was the main security arm of the Basilan ASG. Abu Sabaya's men joined the group of Khadaffi Janjalani in the daily planning and administrative affairs of the group. The Philippine military claims to have killed Sabaya and two others in June 2002. Sabaya's body was never found, however, and speculation has arisen that he may still be alive despite repeated pronouncements that Sabaya was among those who drowned in Sibuco Bay in Zamboanga del Norte.⁴²

The Sulu ASG is a loose assemblage of Muslim secessionist fighters loyal to Commander Robot. As of 2002, the Sulu ASG was composed of sixteen armed groups operating independently in different areas of Sulu. This faction was responsible for the kidnapping of twenty-one tourists at a resort on Sipadan Island in Malaysia on 23 April 2000. But as stated earlier, this group lost its leader with the capture and subsequent death of Commander Robot. His capture yielded further information on the links between Abu Sayyaf and the al-Qa'ida-linked regional Islamic militant group Jemaah Islamiyah.⁴³

Though ASG's main area of operation is in Mindanao, it also has attracted secret followers on Luzon, in Manila, the Philippine capital. The Rajah Solaiman Movement (RSM) is the most significant Muslim organization in Manila known to have established links with ASG. Hilarion del Rosario, Jr. (also known as Ahmed Santos) is known to have been the founder of the RSM. The group, formed in 2002, is named after the last king of Manila before the Spanish conquest in the 1500s. Most of its members are Muslim converts. Like the ASG, the converts want to remake the country as an Islamic state.⁴⁴ Reportedly, the Rajah Solaiman Movement has a special operations group and a special action force and is financed by Saudi Arabian money channeled through various charities in the Philippines. Khadaffi Janjalani allegedly gave the Rajah Solaiman Movement the equivalent of about two hundred thousand dollars for operations in Manila, which include converting Christians to Islam, then recruiting and sending them for terrorist training.⁴⁵

ASG Strategy and Tactics

A research project of the Philippine Marine Corps asserts that Abu Sayyaf is "not basically a conventional or semi-conventional offensive unit in the strictest sense of the word."⁴⁶ Originally, Abu Sayyaf aimed to form an Islamic state, on the Taliban Afghan model, through covert guerrilla action. Today it is an organization of Muslim bandits and pirates "seeking government and international attention to claim influence and power."⁴⁷ However, its doctrine is much the same in important respects:

- Well planned operations, with high probability of success.
- High mobility and adeptness in guerrilla tactics.
- Rapport with and support from local MNLF and MILF fighters. (For major armed actions ASG seeks augmentation by active or former members of these groups, particularly those who are relatives of ASG members.)
- Dispersal, when pursued, into small groups to blend with sympathetic local civilians (often in MNLF/MILF strongholds where troops can be confused, delayed, and contained).
- Separate negotiating team in kidnaps for ransom. (The negotiation cell establishes and maintains contact with the victims' relatives; payments are either personally handed over or laundered through banks. If an entire family is held hostage—such as the Dos Palmas kidnapping—the group releases a family member to arrange ransom for the remaining members.)
- Displays of sympathy to known international terrorist organizations. Willingness to kill or injure Muslims in operations (contending that all Muslims must be willing to shed blood for the glory of Allah).

- Urban terror to divert government attention to mountain hideouts.
- Deliberate dissemination, to evade troops, of false information through commercial VHF radio and unsuspecting members of the populace.
- Kidnapping religious personalities (like Father Cirilo Nacorda, Charles Walton, and two Spanish nuns) for later release—with wide media coverage.⁴⁸

The Basilan and Sulu groups use similar if not identical tactics.⁴⁹ Both factions employ a “water lily” strategy, a concept that aims to avoid military contact by simply sidestepping when military presence is detected and going back when troops are no longer in the area.⁵⁰

The Threat to Maritime Security

Most ASG members and followers (regardless of faction) belong to Muslim families with strong, centuries-old seafaring traditions. Their deep knowledge of the maritime domain gives them ample capability to conduct maritime terrorism. In addition, Abu Sayyaf also possesses equipment that can be used for maritime operations. The Office of the Deputy Chief of Staff for Operations (DCSO-J3) of the Armed Forces of the Philippines (AFP) reports that it has used night-vision devices, thermal imagers, sniper scopes, various types of commercial radio, satellites, cellular phones, and high-speed water craft.⁵¹ Further, ASG has a proven ability to establish linkages with like-minded terrorist groups in Southeast Asia. One of them in particular, the Moro Islamic Liberation Front, has seaborne resources that can be harnessed for maritime terrorism. MILF demonstrated its maritime terrorist capability in February 2000, when it attacked the vessel *Our Lady Mediatrix*, killing forty persons and wounding fifty.⁵²

The explosion of *Superferry 14*, carrying 899 passengers, on 27 February 2004 put the ASG in the spotlight. The tragedy claimed nearly a hundred lives. The Philippine government officially denied that Abu Sayyaf had been involved; President Gloria Macapagal Arroyo issued a statement dismissing speculation that ASG had masterminded the incident. But an ASG spokesperson, Abu Soliman, insisted that Abu Sayyaf was indeed responsible, claiming that the attack was revenge for violence in Mindanao.⁵³ Soliman identified “passenger 51,” Arnulfo Alvarado (a pseudonym of Redento Cain Dellosa), as the bomber. Khadaffi Janjalani confirmed Soliman’s claim and warned the Philippine government that Abu Sayyaf’s “best action” was yet to come.⁵⁴

A Marine Board of Inquiry that investigated the incident ultimately confirmed that Abu Sayyaf attacked *Superferry 14*.⁵⁵ Former Philippine national security adviser Norberto Gonzales has stated in an interview that “because of the

nature of the wreck, half-submerged in the bay, it will be difficult for investigators to prove 100% that it was Abu Sayyaf. But the overwhelming evidence points that way, and I'm certain they were the ones behind the attack."⁵⁶ On 10 October 2004, the Philippine government finally concurred that the ASG had planted the bomb that sank *Superferry 14*.⁵⁷ Presumably it was the work of the Basilan faction with the assistance of the RSM. Redento Cain Delloso, an RSM member, confessed during police interrogation that he had planted a bomb on the ferry.

Plainly, Abu Sayyaf, once a predominantly land-based terrorist organization, is becoming more and more maritime in its operations, to escape the predominantly land-based Philippine military responses to internal security threats.⁵⁸

The Philippine government in 2002 described Abu Sayyaf as a "spent force." Nonetheless, the ASG has apparently become more innovative in its terrorist tactics not only in the Philippines but in neighboring countries of Southeast Asia, particularly in Malaysia and Indonesia. In a telephone interview about the *Superferry 14* incident, Soliman taunted the Philippine government: "Still doubtful about our capabilities? Good. Just wait and see. We will bring the war that you impose on us to your lands and seas, homes, and streets. We will multiply the pain and suffering that you have inflicted on our people."⁵⁹ Indeed, the capability of ASG to wage maritime terrorism should not be underestimated. Intelligence reports indicate that it can still exploit Islam to recruit members and solicit support. Its cellular structure makes detection difficult; thus, it can still launch terrorist acts far from its traditional areas of operation. The ASG is also highly elusive, due to its maritime capability and experience.

Abu Sayyaf has an extensive history of maritime terrorist attacks. Two have already been mentioned: the 1991 bombing of the M/V *Doulous* and the 2000 kidnapping of tourists on Sipadan.⁶⁰ A few months later, on 30 September 2000, ASG kidnapped three Malaysians in Pasir Beach Resort in Sabah using a speedboat. The April 2000 kidnapping ended only in 2001, when the ASG reportedly received a fifteen-million-dollar ransom from the Philippine government.⁶¹ The September 2000 kidnapping was resolved more quickly; Philippine troops rescued the three Malaysians in Talipao, Sulu.

On 27 May 2001, the ASG waged another act of maritime terror when it abducted three American citizens and seventeen Filipinos at the Dos Palmas resort on Palawan. This act can be considered a maritime attack, because the target was a maritime area—a beach resort. Some ASG members involved in the incident were disguised as diving instructors. The incident received international coverage, because several of the victims, including an American citizen, were murdered and beheaded. During a rescue operation mounted by the Filipino government in 2002, two victims, one of them a U.S. citizen, were killed.⁶² The Dos Palmas incident was a wake-up call for the United States.⁶³ The result was a

controversial joint operation in 2002, BALIKATAN 02-1, aimed at destroying Abu Sayyaf.⁶⁴ BALIKATAN 02-1 resulted in the neutralization of many ASG members, including, as noted, the reported death of Abu Sabaya and the eventual capture and death of the Sulu faction leader, Commander Robot.

Nonetheless, to generate funds in an attempt to recover from the impact of BALIKATAN 02-1, in September 2003 Abu Sayyaf threatened to hijack vessels of the Sulpicio and WG&A lines. In April 2004, just two months after the *Superferry 14* incident, the ASG kidnapped two Malaysians and an Indonesian in a sailing craft. By this time the Philippine Coast Guard was considering the Philippines increasingly under threat of maritime terrorism.⁶⁵ Manila has identified twenty-six ports and anchorages vulnerable to such maritime terrorist attacks.⁶⁶

THE PHILIPPINE RESPONSE TO MARITIME TERRORISM

In its 2003 annual report of accomplishments, the Philippine Department of National Defense (DND) reported 117 armed engagements with Abu Sayyaf. Of them, eighty had been initiated by the Philippine forces, the rest by the ASG—twenty in ASG guerrilla operations, seventeen in terrorist activities. The DND reported the neutralization of 174 ASG members—eighty killed (including Father Roman Al-Ghozi, an international terrorist linked to the group), seventeen captured, three surrendered, and seventy-four apprehended. In that year Philippine forces also arrested Commander Robot and rescued all kidnapped victims in 2003, including four Indonesian hostages. The Philippine armed forces aimed to reduce Abu Sayyaf strength to less than one hundred, from 461, by the end of 2004.⁶⁷ But Abu Sayyaf's strength has only been cut to 380, as of the second quarter of 2005. Nonetheless, the Department of National Defense reports that "the ASG is presently factionalized and its remnants have splintered and are constantly on the move due to continued military pressures."⁶⁸

Notwithstanding this drastic reduction in numerical strength, Abu Sayyaf continues to be a maritime threat, "a group we must monitor closely, not only because it might desire to strike the broader maritime sector, but because its membership includes well equipped, highly trained fighters with significant experience in both day and night maritime combat operations."⁶⁹ Addressing this threat will require a strengthening of the intelligence capability of law enforcement agencies in the Philippines. A sound intelligence system is a vital component of any counterterrorism strategy, whether land-based or maritime, as a source of information on the nature of terrorist groups, the threat they represent, and their intentions, capabilities, and opportunities.⁷⁰ Accurate and reliable intelligence may in fact be the most effective weapon against terrorism, enabling "operational agencies and law enforcement authorities to develop measures to detect a terrorist threat at the planning and preparation phases."⁷¹

Philippine military officials, however, admit that the nation has a very weak intelligence network. Despite Administrative Order 68, issued by the government on 8 April 2003 to strengthen the National Intelligence Coordinating Agency (NICA), state intelligence capability remains weak. A former armed forces chief of staff, General Narciso Abaya, has candidly acknowledged that the nonsharing of intelligence information is hampering the government's antiterrorism campaign.⁷² Abaya believes that a culture exists among intelligence units in the Philippines to withhold vital intelligence information: "I think we have to improve on our intelligence. The trend now is not the need to know but the need to share. That is the emerging trend among intelligence units all over the world."⁷³ In fact, he lamented, "sometimes, our intelligence units zealously keep to themselves intelligence information that, if fused with the information of other intelligence units, would give a more comprehensive picture of the enemy."⁷⁴

There have also been serious allegations that the military and provincial governments are coddling Abu Sayyaf. The International Peace Mission that went to Basilan on 23–27 March 2002 reported that "there are consistent credible reports that the military and the provincial government are coddling the Abu Sayyaf."⁷⁵ In such circumstances a military approach "will not work to solve the problem."⁷⁶ As early as 1994, in fact, there were charges that police and fake police officers were involved in an ASG attempt to smuggle firearms into Zamboanga City from Manila and Iloilo on board the motor vessel *Princess of the Pacific*. The police and the military authorities insist that connivance with ASG is not being tolerated and that those found guilty of it will be punished.

Nonetheless, the Philippine military recognizes that a military solution alone cannot defeat Abu Sayyaf. An after-action report of the ASG Combat Research and Study Group of the Training and Doctrine Command of the Philippine Army submitted on 19 September 2001 to the commanding general of the Army states:

The ASG problem cannot be solved through military solution alone. It should be approached by complementary and mutually reinforcing efforts by the civil agencies and the military. The government must concretely pursue social, economic and political reforms aimed at addressing the root causes of the problem. Effective measures must also be undertaken to ensure the welfare and protection of civilians and reduce the impact of the armed conflict on them. These should necessarily include intensified delivery of basic services to conflict areas.⁷⁷

In other words, the Abu Sayyaf threat needs a comprehensive and holistic approach. To that end the Philippine government established the Cabinet Oversight Committee on International Security (COCIS). COCIS uses what is known as the

“strategy of holistic approach” (SHA) to overcome insurgency problems in the Philippines generally. The SHA has four major components: political, legal, and diplomatic; socioeconomic and psychosocial; peace, order, and security; and information.

The political/legal/diplomatic component of the SHA envisions political reforms and institutional development to strengthen democratic institutions and empower the citizenry to pursue personal and community growth. This component aims to develop and propagate Philippine democracy to confront the communist and Islamic fundamentalist ideology. Its cornerstone is a process based on “Six Paths to Peace”:

- Pursuit of social, economic, and political reforms
- Consensus building and empowerment for peace
- Peaceful, negotiated settlement with rebel groups
- Programs for reconciliation, reintegration, and rehabilitation
- Conflict management and protection of civilians caught in armed conflict
- Construction and nurturing of a climate conducive to peace.

The socioeconomic/psychosocial component of the holistic approach, for its part, aims to alleviate poverty in the country through the acceleration of development programs of the Philippine government. It also set out to develop and strengthen a spirit of nationhood among the people, by developing national character/identity without loss of cultural integrity. The peace and order/security component is designed to protect the people from the insurgents and provide a secure environment for national development. More importantly, this component has the specific goal of denying the insurgents “access to their most important resource—popular support.” Finally, the information component integrates the SHA. It “refers to the overall effort to advocate peace, promote public confidence in government and support government efforts to overcome insurgency through tri-media and interpersonal approaches.”

The operational aspect of the holistic approach is of a dual nature. President Arroyo explains, “How do we address this problem [of] insurgency? Through the right-hand and left-hand approach. [The] right hand is the full force of the law and the left hand is the hand of reconciliation and the hand of giving support to our poorest brothers so that they won’t be encouraged to join the rebels.”⁷⁸

While the SHA is meant to primarily combat communist insurgency, it is also being applied to terrorist threats.⁷⁹ The Philippine government disestablished COCIS in October 2004 and transferred its related responsibilities to the Anti-Terrorism Task Force (ATTF), which had been formed on 24 March 2004.

The ATTF is presently the central government body responsible for strategies, policies, plans, and measures to prevent and suppress terrorism in the Philippines, particularly by Abu Sayyaf.

The ATTF's main operations, however, are predominantly land based rather than maritime, and in general it is too early to assess the effectiveness of SHA in countering Abu Sayyaf. According to its own reports, however, from March to June 2004 the ATTF killed fourteen ASG members, captured fourteen, and arrested twenty-nine others.⁸⁰ Through the ATTF, the Philippine government in October 2004 charged six suspected ASG members with responsibility for the *Superferry 14* attack. Two, believed to have planted the bomb, are in police custody; four others, including Khadaffi Janjalani and Abu Soliman, remain at large.⁸¹

To deal with the maritime terrorist threat posed by Abu Sayyaf, it is imperative that the Philippine government strengthen its intelligence capacity. Still, intelligence is a short-term remedy; a long-term solution requires addressing root causes. The root causes of Abu Sayyaf's struggle are comprehensive and multi-dimensional—if most of its original members have resorted to banditry and piracy, there are others who adhere to its original religious aim—and therefore so must be the state response.

The "strategy of holistic approach" is an attempt to operationalize that necessity. However, the operations it has generated are predominantly on land. Moreover, its success will depend on the extent to which the Philippine government can win the hearts and minds of the people, particularly those in areas vulnerable to terrorist agitation and propaganda.

The Philippine government cannot address this growing threat alone. It needs the cooperation of other sectors from the civil society and non-governmental organizations. It also needs the cooperation of like-minded regional states. Only sustained interagency, intersociety, and interstate cooperation can effectively address the maritime terrorist threat posed by Abu Sayyaf.

NOTES

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 14. Joshua Ho, of the Singapore-based Institute of Defence and Strategic Studies, gave this analysis in an interview with the *Economist*: "Shipping in Southeast: Going for the Jugular," *Economist*, 10 June 2004, available at www.economist.com/World/asia/displayStory.cfm?story_id=2752802.
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RAEDER VERSUS WEGENER

Conflict in German Naval Strategy

Commander Kenneth P. Hansen, Canadian Forces Maritime Command

Two of the most historically significant German naval officers of the interwar period began their careers together. Erich Raeder and Wolfgang Wegener both joined the navy in 1894, and both eventually attained flag rank. Their careers followed remarkably similar paths as they advanced up the ladder of naval power.¹ Serving together in East Asia as ensigns aboard the cruiser *Deutschland*, they formed a friendship that surpassed mere professional acquaintance—Raeder would be the godfather of one of Wegener's children.² In his memoirs, Raeder would describe Wegener and two other officers training with him as “my intimate friends.”³ By the end of their naval careers, however, the two admirals

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were to become inveterate enemies. So great would be their enmity that upon Admiral Wegener's death in 1956, Raeder, who was the senior surviving member of their enlistment “crew,” refused to deliver his eulogy, as was the normal tradition of their service.⁴

It has been suggested that Raeder's resentment of Wegener was due to personal jealousy and the obstruction that Wegener's theories represented to Raeder's plans for recreating between the wars a German world-power fleet (*Weltmachtflotte*). A number of naval historians have been critical of Raeder's leadership, supporting the general view that the German naval leadership was striving to recreate a “Tirpitzian” battle fleet.⁵ Specifically, many prominent German historians have also criticized Raeder's leadership.

Their collective assessment implies that interwar German naval leaders learned nothing from the experiences of the First World War and that they directed all of their energy toward preparing for another major fleet engagement against the Royal Navy. Raeder has been accused of attempting “to formulate strategy . . . like his predecessor Tirpitz, . . . without weighing national goals, interests, threats, or strategies, seeing the fleet largely as an isolated entity, detached from grand strategic planning.”⁶ An American historian writing in 1940 felt that Raeder and his subordinates suffered from “an atrophy of strategic thought.”⁷

Severe criticism has also extended to the capital acquisition plans and operational concepts employed by the Kriegsmarine during the Second World War. One of the most damaging such attacks accuses the Germans of having no coherent concept of operations: “The important decisions on warship construction were changed several times and were not based on a detailed, structurally well-thought-out plan.”⁸ In this view, the German admiralty had not “even a modicum of strategic sense in the handling of capital ships”; for instance, *Bismarck* should have been held in reserve until *Tirpitz* was operational, at which point these two battleships should have been used together with the battle cruisers *Scharnhorst* and *Gneisenau* and an aircraft carrier. This “might have put an incalculable strain on British resources” and encouraged the Italian navy to more aggressive action. On this view, the Germans resigned themselves to their status as an inferior naval power and as a consequence “wasted their great ships singly as mere commerce raiders.”⁹

Notwithstanding such strenuous, authoritative condemnation, the case is not closed; another interpretation is possible. These critical scholarly assessments are significantly out of step with the opinions of the senior members of the German naval staff of the time, whose postwar writings have been largely ignored. Their collective assessment was that German strategy and operations were consistent with the tasks of the navy and its resources. They refute repeatedly the notion that the German navy was designed or organized for a classic Mahanian naval confrontation with the Royal Navy.

Indeed, only a few postwar scholars have entered the debate with an alternative view to the standard *Weltmachtflotte* argument, arguing that Admiral Raeder was correct to advocate a balanced fleet and not to concentrate solely on U-boats, as Admiral Dönitz wished, or on a fleet optimized for cruiser warfare.¹⁰ They suggest that the naval treaties of the interwar period had a profound influence on German naval strategy, force structure, and operational planning. Further, they point out that contemporary British intelligence assessments of German operating concepts ascribed to them an originality and potential lethality that caused great concern inside the Royal Navy.¹¹ That consternation is in itself an indication that the German naval planners had produced something

more imaginative and innovative than a conventional fleet structure for a hopeless force-on-force engagement.

The British concern over German naval combat potential is even more noteworthy in view of the broad range of naval tasks that the Kriegsmarine had to accomplish. The German navy of the 1930s was confronted by what has been described as a classic “medium-power naval dilemma.” The Kriegsmarine was caught perilously between its own limited capabilities, national maritime tasks, and a limited budget.¹² General Admiral Otto Schniewind, Commander in Chief Fleet, 1941–44, and Admiral Karlgeorg Schuster, Commander in Chief South Group, 1942–43, enumerated the three tasks of the German navy at the outbreak of the Second World War: first, to defend the German coast and coastal waters from enemy naval activity; second, to protect German shipping in territorial waters and prevent the interruption of seaborne trade with neighboring states; and third, “to attack with all forces at their disposal the enemy shipping and lines of communication of the Western Allies, to damage them and if possible to paralyze them.”¹³

These were fundamentally dissimilar and seemingly incompatible missions. Admirals Schniewind and Schuster categorized the third task as “the biggest and most difficult” but clearly gave it the lowest place in their hierarchy. The first and third tasks amounted to different aspects of sea denial; a force optimized for a long-term anti-mercantile campaign would be inadequate for homeland defense.¹⁴ The second task called for the exercise of sea control. Moreover, the “reach” implied by the first and second tasks was substantially different from that required by the third. Satisfying such diverse tasks and reconciling the radically different capabilities they respectively mandated would indeed be a tall order. Admiral Raeder, when he became the navy service chief, would be compelled to adopt a flexible approach to the development and employment of naval power.

Such considerations, alongside examination of the theoretical bases of each admiral’s position and comparison to the writings of the American admiral Alfred Thayer Mahan and the French admiral Raoul Castex, begin to make sense of the great dispute between the two former friends. More importantly, such a process sheds new light on German naval policy and force developments before the Second World War. The strategic requirements of Germany in a global war in conjunction with resource constraints, it will be seen, compelled the naval leadership to be innovative, flexible, and pragmatic.

“MEN OF PRINCIPLES”

Erich Raeder, who was to be head of the German navy for an extraordinary fourteen years and four months, would later be described by Vice Admiral Helmuth

Heye (who, as a commander in 1938, served as First Operations Officer on the German naval staff and during 1943–44 would be chief of staff for Naval Command North) as a leader who set an example that his staff officers found both admirable and practical. Heye found Raeder impartial, apolitical, and task oriented: “His leadership of the navy was very centralized and unified. . . . He attempted to keep the navy clear of all internal political difficulties.”¹⁵ One historian describes Raeder as “a man of principles[,] . . . [one who] rarely in-



Grand Admiral Erich Raeder

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spired enthusiasm but instilled solid respect in those who served under him, . . . a schoolmaster.”¹⁶

Another goes farther, asserting that Raeder was strongly in favor of intellectual development and wanted “to ensure that the naval officer corps drew upon the best and brightest youth that Germany had to offer.”¹⁷ On this view, Raeder genuinely regarded the entire German navy as one “naval family,” a sense that he expended considerable personal effort to nurture. However, there were limits to the grandfatherly schoolmaster’s familial inclusiveness and intellectual latitude. It has been claimed that because of Raeder’s philosophy of strict professional excellence (*Ressortdenke*), “intellectual challenges [were] . . . carefully omitted from the Naval Academy’s (*Marineschule*) curriculum and [from] later training.”¹⁸ It has even been argued that all German naval training encouraged mental and behavioral conformity, presumably with the views and conduct of the service chief, who “supported the [Nazi] re-

gime unflinchingly and proved merciless against malingerers, deserters, and those who questioned the authority of the Führer.” If that is true, Raeder’s strictness and intolerance of independent thought might have been strong enough to break the bonds of early friendship with Wegener and their common “crew” membership. However, that Raeder was a “man of principles” makes jealousy unlikely as the main motivation behind the feud.

The falling-out between Grand Admiral Raeder and Vice Admiral Wegener appears instead to have been ideologically based and directly related to Wegener’s professional writing. As Raeder began to exceed Wegener in rank, he would use his position and influence openly to suppress the strategic theories of his classmate and to isolate his former friend. Wegener was promoted to rear admiral on 1 March 1923, serving as inspector of naval artillery. With only four vice admirals’ positions, the competition for advancement was stiff, and

Wegener was directed to retire in 1926 by Admiral Zenker, the naval chief. Raeder, eventually head of the German navy, would direct officers under his command to write articles discrediting Wegener's work. He would also endeavor, unsuccessfully, to stop the publication of Wegener's book *The Naval Strategy of the World War (Die Seestrategie des Weltkrieges)*.¹⁹ The importance of the point is not merely biographical; the differences between the two admirals' philosophies were emblematic of a fundamental divergence at the highest levels of German naval strategy development during the interwar era.

THE WEGENERIAN TREATISE

Wegener's book, which was published in 1929 and reissued in a second edition in 1941, was actually a compilation of three staff papers that he had written during 1915, while serving as a fleet staff officer in the rank of lieutenant commander. Indeed, since his earliest days in the navy, Wegener had demonstrated considerable literary and intellectual ability. Between 1902 and 1907, he wrote no less than seven noteworthy papers, most of which while on the staffs of the Naval Education Department and the Naval Academy. After three years of sea duty between 1908 and 1911, during which he served as a gunnery officer in the battleships *Preussen* and *Kaiser Barbarossa* and finally in the heavy cruiser *Blücher*, Wegener's evident staff skills resulted in his promotion and posting as a fleet staff officer. His first assignment in this capacity was under Rear Admiral Gustav Bachmann as his Second Staff Officer, but his billet was quickly changed in 1912 to the First Staff Officer of the First Battle Squadron, commanded by Vice Admiral Wilhelm von Lans. The significance of this assignment should not be missed—the First Battle Squadron was one of the premier formations in the fleet, composed of eight powerful battleships of the *Nassau* and *Helgoland* classes. Wegener's abilities had landed him a high-visibility operational post under the direct supervision of a very senior flag officer.

By February 1915, when the first of Wegener's controversial papers was issued under the signature of Admiral Lans, the reality of the German naval situation was becoming apparent to most observers. The enormous cost of building, supplying, and crewing the fleet had been borne only grudgingly by both the German army and the public.²⁰ After the loss of *Blücher* at the Battle of the Dogger Bank (see map 1), Admiral Tirpitz and his Risk Theory (*Risikogedanke*) became the object of increasing criticism from many quarters.²¹ The inactivity of the High Seas Fleet and the mounting effect of the British "hunger blockade" were having disquieting effects. Wegener's questions about the navy's employment came at a time when the German army was increasingly resentful that the navy had suffered relatively little when its own casualties were heavy; the German public, for its part, was generally skeptical about the navy's performance;

MAP 1



and the service itself was suffering a crisis of confidence. When the first of Wegener's papers was circulated, Admiral Tirpitz became enraged. That it was possible for Wegener to write two further papers and release them under his own signature is truly remarkable, with regard not only to his junior position and Tirpitz's ire but to the obvious fracture it represented in the strategic thinking of the German naval officer corps.²²

"A Dead Angle in a Dead Sea"

Collectively, Wegener's three papers argued that the strategic-defensive orientation of the Risk Theory was invalid, in that it did not threaten the principal British vulnerability, maritime trade. The complete dependence of British industry

upon imported resources and the inability of agriculture to feed the nation had been well known long before the First World War. The obvious way to bring the imperial giant to its knees was to sever the maritime jugular: "In quintessentially Mahanian terms, the [Wegenerian] treatise stated that sea power consisted of control of maritime communications, particularly the protection of vital sea lanes." Writing in an abrupt and forceful style, highlighting conclusions in terse, one-sentence paragraphs, Wegener charged the wartime leadership with misunderstanding the fundamental uses of the sea. Moreover, he accused it of committing the fleet to battle in pursuit of tactical victories that, having no strategic consequence, were purposeless. Wegener combined classically Clausewitzian logic, which dictated that battle must be accepted only in support of a political aim, with an astute assessment of the German military situation and a clear appreciation of European geography. From all this he concluded, "Our defensive operations plan lacked an object of defense. Therefore, there was no battle for command of the sea in the North Sea. The Helgoland Bight was, is, and remains a dead angle in a dead sea." Wegener asserted that geographic position was just as vital as the possession of a fleet of ships and that such position should relate directly to the willingness of one's forces to engage the enemy: "The tactical will to battle is a correlate of geography."²³

Having argued that the current strategy was ineffective, Wegener set out his own vision of how the British could be attacked effectively: "Naval strategy is the science of geographic position . . . with regard to trade routes." He declared that the only British traffic vulnerable to German interference was the Norway–Shetland Islands–Scotland route through the North Sea. In order to attain a

geographic position of strategic relevance with respect to British mercantile shipping, he argued, it was necessary to mount a “northward strategic-offensive operation” that would change the geographic setting. He proposed expansion through Denmark and southwestern Norway and then over to the Shetland Islands, “the Gate to the Atlantic.” Wegener insisted that by positioning itself to threaten a trade route the German fleet could overcome the British disinclination to tactical engagement in favor of distant blockade. The British would then be obliged to commit to battle, during which “the compulsion that we would have exerted would have increased with our every success.”

Wegener felt, writing soon after the First World War, that had the German navy been in a position to threaten a trade route, “every battle, every skirmish would have contributed towards a decision. Only battles with the greatest possible strategic exploitation would have existed—no battle ‘in itself,’ whose effect would have paled without any resulting strategic exploitation.” In addition, Wegener envisioned for a future war another, larger operation, taking the strategic offensive to seize French ports on the English Channel and on the Atlantic so that an even greater campaign against British trade routes could be conducted.²⁴ Possession of such ports would impel both sides toward a final and decisive naval confrontation. Ultimately, German ability to control lines of communication would arise not from operations designed to exert such control, however, but as a natural consequence of that conclusive battle. Wegener’s logic, then, was pure Mahan—he sought to imperil British trade as a means of forcing the Royal Navy into a fight to the death.

The influence of Rear Admiral Alfred Thayer Mahan’s writing upon Kaiser Wilhelm II and the entire German navy has been extensively documented. It is claimed that there was in that service an “almost slavish devotion” to the Mahanian doctrine, to which Admiral Raeder did not need to refer, as it had been accepted “as an article of faith” by the German naval officer corps;²⁵ “Mahan was the Bible for the German Navy.”²⁶ The copious marginal notes in Wegener’s copy of Mahan’s *The Influence of Sea Power upon History* show how marked was the similarity between the Wegenerian and Mahanian philosophies. Wegener tried to orchestrate a geographic setting for “strategic exploitation,” a major, decisive battle that would take place in circumstances favorable to Germany; “A strategic offensive would have altered the course of the war” just ended.²⁷ Tirpitz, instead, had expected the historically aggressive British to bring the battle to him somewhere in the southern or central North Sea.²⁸

Wegener’s interest in securing bases with better access to the North Sea, particularly those with good deep-water access (which would be less vulnerable to mining) had very strong Mahanian overtones.²⁹ Wegener came logically to the same sort of conclusion that Mahan would have advocated—that a decisive

conflict could be achieved under circumstances that implicated the security of British merchant shipping.

The Strategic Debate

Wegener's staff papers, when they originally appeared, were bound to attract attention that had both positive and negative consequences. The upper echelons of the German naval staff gave them a mixed reception. Some flag officers, such as Admiral Hugo von Pohl, Commander in Chief Fleet, were very positive about his work, while others, such as Captain Adolf von Trotha, who would become head of the service during 1919–20, thought that "it lacked aggressive spirit."³⁰ Before 1914 such professional critiques of naval strategy could have been construed as constructive or academic, but in the midst of war against Britain, overt and strident criticism by a middle-ranking staff officer was risky, to say the least. While Wegener enjoyed a certain amount of protection through a distant relationship to Fleet Admiral Henning von Holtzendorff, chief of the Admiralty Staff after September 1915 and a man he referred to as his "uncle," he could not have counted on it forever. In 1916, Fleet Admiral Reinhard Scheer (the new commander of the First Battle Squadron), Vice Admiral Eberhard Schmidt, and Captain Magnus von Levetzow (the Deputy Chief of the Operations Division) paid a personal visit to Wegener and ordered him to cease writing for the remainder of the war.³¹ He complied; promotion and command of the light cruiser *Regensburg* followed soon afterward, in 1917. The return to sea duty helped to still Wegener's pen, although informally he remained very outspoken throughout the war.

After the war, Wegener reentered the strategic debate with his characteristic vigor. In 1926, he submitted a staff memorandum that reprised his earlier writing. The thrust of Wegener's work remained that Germany must formulate a mature concept of seapower if it aspired to improve its national status; further, Britain was Germany's "natural enemy," the British fleet a deadly obstacle that could not be overcome without a fundamental restructuring of the geographic realities of the German situation. That restructuring, attained by fleet engagement, would further German "world-political strategic aims." By the time his book appeared in 1929 the stridency of Wegener's anti-English tone had moderated, but the essentials were the same.³²

Reviews of the book outside Germany, when it appeared, were as mixed as they had been of the original papers. It was translated into Russian and republished in the Soviet Union in 1941. There Wegener was viewed as the leader of a "new German school" that had realized the geographic importance of Scandinavia to Germany—a factor the Russians felt had been missed during the First World War. Wegener's theories were even taken by Russian specialists as the

“official” view of contemporary German naval strategy.³³ The Soviet historian V. A. Belli, writing in the July 1940 issue of *Morskoi sbornik* (the preeminent Soviet naval journal), declared that “the struggle for Scandinavia [was] above all [a German campaign] to gain a favorable strategic position,” concluding with the observation that “a favorable strategic position [was an essential] element of command of the sea.”³⁴ The similarities to Wegener are unmistakable.

As for the Royal Navy, a 1929 article in *The Naval Review* by Alfred Dewar took a far less favorable view of the importance of geographic position to naval strategy. Dewar felt that the crux of naval flexibility had been best summed up by Admiral John Fisher in 1910: “To be free to go anywhere with every d——d thing the Navy possesses.” The British reviewer opined: “Wegener drives geography too hard.”³⁵ Similarly, an American analyst thought Wegener’s theories were both dangerous and misleading:

The result [of his study] was a courageous attempt to lead the German Navy out of the maze in which Tirpitz had left it, was in the end, merely to plunge it into another confusion, nearer to the truth, more subtle, and hence in a way more dangerous. By shift[ing] from the “command” to the struggle for it, and again from “command” over an opponent to “command” over a geographic area or trade route, Wegener was led to regard “command” as something that could be localized, and hence divided, until he finally arrived at that most dangerous and misleading identification of “command” with the “control of sea-communications.”³⁶

Reversals and Weaknesses

One of the German naval officers who could not support Wegener’s ideas was his crewmate Erich Raeder. When Wegener was First Staff Officer in the First Battle Squadron, Raeder was serving in the same capacity under Vice Admiral Franz von Hipper, Commander of the Scouting Forces. Raeder’s potential too had evidently been recognized, and it had been rewarded with an equally prominent posting under one of the brightest and, after the Battle of Jutland, most famous of all German admirals. But if Wegener’s and Raeder’s career paths were so far parallel, their professional outlooks were diverging. Hipper “[was] highly impressed with the Wegener trilogy and sought to submit it to Admiral Bachmann of the Admiralty Staff for evaluation—until his First Admiralty Staff Officer, . . . Erich Raeder persuaded him otherwise.”³⁷ Plainly, Raeder had found something in the work to which he objected strongly. What was it? To understand, let us return to Wegener’s thesis.

When Wegener’s wartime papers first appeared, Tirpitz had assigned two senior captains to draft counterposition papers; these replies attacked the details of Wegener’s work but did not “come to grips with its strategic insights.”³⁸ Actually, Wegener’s thesis had enough inconsistencies of detail and

contradictions in terms to be vulnerable on the level of technicalities alone. Despite the accuracy of the basic geostrategic assessment and the remarkable clarity of Wegener's style, many reversals of position are apparent both within and between the three papers. Ever meticulous, Raeder would certainly have latched onto these glaring weaknesses and on that basis questioned the entire work.



Admiral Wolfgang Wegener

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As an example, immediately after his statement (which became famous) belittling the Helgoland Bight battle as a fight for “a dead angle,” Wegener declares, “And yet, we once did exercise command of the sea from the Helgoland Bight—namely, with the U-boats, which even at great distances from their base have the ability to exert lasting pressure upon enemy trade routes.”³⁹ In this short sentence Wegener betrayed a misunderstanding of the term “command of the sea” and so undercut his thesis that fleets require favorable geographic position to effect such command. U-boats were in fact instruments of sea denial and trade interdiction, not sea control. The distant blockade of German ports by the Royal Navy was never broken by the German submarine offensive; British command of the sea, though challenged, remained intact. In another place, Wegener effectively countered his own “Gate to the Atlantic” thesis by openly doubting that the British would really contest a challenge in the Shetland Islands and suggesting they would likely relocate the trade route.⁴⁰

Further, Wegener, having clearly identified the importance of British maritime commerce, failed to recognize that the converse was also true. That is, the Baltic was vital to the Germans during the First World War for the shipment of strategic materials and commercial goods. Again, Wegener in one place complains bitterly, “Our defensive operations plan lacked an objective of defense” and that “the position of the Helgoland Bight commanded nothing.” Very soon afterward he contradicts himself: “Imagine that our fleet had been totally defeated [there]; what consequences this would soon have entailed for our economic and military situation. We could not have maintained our east and west front with an indented or even strongly threatened northern front.”⁴¹ In such passages his appreciation of the German position seems as weak as his assessment of Britain's position is accurate.

The greatest weakness in Wegener's proposal for an offensive campaign in the North Sea is his complete failure to suggest how it could be accomplished.

Knowing full well the *Risikogedanke* assumption that an attacking force needed a one-third superiority, he does not even hint how an inferior German force could seize the Shetland Islands.⁴² Helmuth Heye, at the time a Plans Division staff officer, was later to write that the Washington Conference tended to keep small fleets inferior despite technological innovation; accordingly, Heye felt, qualitative differences could never make up for inferiority in numbers.⁴³

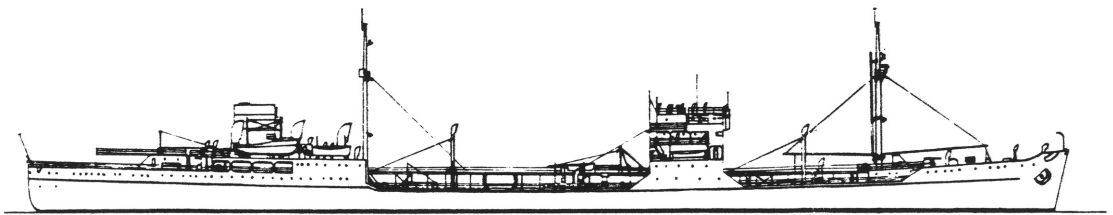
Wegener's writing never addressed this major issue. His theoretical foundation made set-piece battle the object of his proposal for aggressive action, although as a gunnery officer of considerable experience he should have been well aware of the overwhelming disadvantage under which his own inferior fleet would labor;⁴⁴ Wegener himself complained bitterly of the attitude of inferiority that their smaller ships and guns inculcated among German crews.⁴⁵ Once again, Mahan's "big-ship mentality" and emphasis on concentration of force for decisive engagements is clearly evident in his thesis.⁴⁶ Wegener, like Mahan (and despite his geopolitical orientation), ignored the economic realities of his theories.⁴⁷ German naval force structure was dictated by systemic factors; Germany simply did not possess the resources necessary to produce the naval capability Wegener's vision seemed to require.

RAEDER AND THE REALITIES

The limitations of German naval capability were set by national defense policy, which was focused on priorities dictated by the military situation on land. The naval policy that resulted reflected the pragmatic convictions of Erich Raeder. Decades later, General Admiral Herman Boehm, who was to be Commander in Chief Norway in 1943, outlined post-First World War German naval policy prior to the rise to power of Adolf Hitler. In those years it was strictly limited to the prospect of a war with Poland, which would likely draw in France against Germany. According to Boehm, the German navy was tasked with the protection of East Prussia against French naval intervention: "At that time the basic idea of the Naval High Command was to prepare for a short counteraction against any Polish aggression and, by securing of supplies from overseas, also against France."⁴⁸ The threat to East Prussia in the event of French naval intervention was clear; as Rahn has observed, "without naval protection, Poland could cut the sea route across the Baltic, the only reliable line of supply for East Prussia."⁴⁹ Raeder, as service chief, well understood the German navy's vital defensive role, and early ship designs in his tenure were defensive, not offensive, in nature. Contrary to popular opinion, for instance, the armored ships (*panzerschiffe*) of the *Deutschland* class were designed specifically for this two-front French-Polish scenario.

It is the high endurance and relatively heavy armament of the *Deutschland*-class that has erroneously attracted attention to the German *panzerschiffe* as commerce raiders, designed from the outset for “both large-area warfare in the North Sea and offensive operations in the Atlantic.”⁵⁰ Instead, their extended cruising range was meant to facilitate “tip-and-run tactics” in the North Sea against an opponent who was superior but not overwhelming. (The diesel engines that gave them such endurance had “teething problems” that brought strong criticism at the time.)⁵¹ Their “long legs” were valuable because they permitted the sustained use of speed for tactical advantage. The potential French naval threat was a blockade of German ports by a cruiser squadron, reinforced by a modernized but old battleship: the *Deutschland*-class ships were intended to break it. Optimized for North Sea operations, they proved “wet” ships when later committed to trade warfare on the open ocean, and the poor performance of their diesel engines became a major limitation; altogether, they were far less imposing ships than has been portrayed.⁵²

ERMLAND (1940), FRANKEN, UCKERMARK, HAVELLAND



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Another point of divergence between Raeder and Wegener was the relationship of Scandinavia to German naval aims. If for Wegener it bounded on the east the “Gate to the Atlantic,” for Raeder as a fleet staff officer it related primarily to the absolute necessity to the German war effort of Swedish iron ore, shipments that could be denied by an enemy in Norway. Germany’s self-sufficiency in iron ore was significantly less in 1939 than in 1914.⁵³ One result in the Second World War was to be a division of effort between the interdiction of Allied shipping on the open ocean and the protection of German shipping. A second would be Raeder’s recommendation to invade Norway, although he believed doing so “violated a fundamental rule of war by operating at a considerable distance from its home bases and across waters at that time more or less dominated by the enemy,” and heavy losses were probable.⁵⁴ Both Admirals Wegener, in his earlier writings, and Raeder concluded that moving into Norway was essential; Raeder, however, in 1940 would actually seek permission to do so only when convinced that Norwegian neutrality could not be relied upon to secure the iron ore supply—not in

order to provoke a decisive battle, from which, Wegener assumed, the critical commodities would flow as a consequence of victory.

The reputation of Raeder as a naval officer of Tirpitzian (and thus Mahanian) lineage persists, and the Norwegian campaign (along with the “Z” shipbuilding plan, discussed below) is frequently offered in evidence. Raeder, however, had quite different theoretical foundations and upbringing. One of the earliest and most profound influences on Raeder was Admiral Franz von Hipper. As his First Staff Officer, Raeder would have been involved in Hipper’s remarkable plan to employ the entire German battle cruiser force in the North Atlantic. The aim was to draw away, by large-scale commerce raiding, British surface forces from the blockade of Germany.⁵⁵ Hipper was endeavoring to generate opportunities for portions of the German fleet to engage the Royal Navy on more favorable terms and, at the same time, to conduct a dynamic form of anticommerce warfare (*Kleinkrieg*) against the British sea lines of communication. In the end, Hipper’s plan was dismissed by the high command because it did not conform to the Tirpitzian strategy of decisive battle in the North Sea.

Hipper’s departure from Tirpitzian thinking was also evident in his advocacy of ships with increased weaponry, speed, and endurance. The armor-versus-speed argument went on endlessly in all naval headquarters; it is the notion of increased range that has particular significance here. Successive classes of German capital ships showed only negligible improvements in range;⁵⁶ the endurance of German battleships tended to be between four and five thousand nautical miles at an operational speed of approximately fourteen knots, as befitted Tirpitz’s vision of the theater of operations limited to the North Sea. Hipper’s theories on naval warfare were decidedly neither Tirpitzian nor Mahanian; Raeder, then, was exposed to innovative thinking in his early days as a fleet staff officer.

Soon after the Great War, Raeder was posted to the Naval Archives (*Marinearchiv*), where he wrote two of the three official volumes on German cruiser warfare. His work, which earned him an honorary doctorate from the University of Kiel, pointed to the lack of effort in this aspect of the war; in particular, it “criticized the High Seas Fleet Commander for not undertaking operations which would support the cruiser squadron under Count von Spee fighting its way home from the Far East.”⁵⁷ Raeder’s divergence from the Mahanian conception of naval warfare thus continued.

Raeder’s elevation in 1928 to Chief of the Admiralty, relieving Admiral Zenker, was a further indication that his ideological heritage was not Tirpitzian. The defense minister at the time was a retired lieutenant general, Wilhelm Groener. Groener, who had been in charge of logistic support to the army during the Great War, was not a fleet enthusiast. He considered that the imperial navy had been a luxury and an unnecessary drain on funds, one that the army could

not now afford.⁵⁸ Had Raeder espoused the Tirpitzian doctrine strongly, Groener would not have appointed him.

In the late 1920s the German navy was being publicly accused of having provoked, prolonged, and, eventually, lost the war. The naval officer corps itself was divided by a storm of controversy over Tirpitz's memoirs, which had been published in 1919, and over Wegener's writings, now in book form. Raeder responded by suppressing all critical publications—not out of envy over Wegener's growing reputation as a strategic thinker or to defend the image of Tirpitz but to reestablish the German navy as a unified, viable, and reliable arm of the government. In view of the ruthless interservice rivalry between the army and navy (and later the air force), Raeder felt it was essential that the navy preserve and enhance its professional standing if it was to have a practical naval role in foreign and domestic policy.

Elements of a New Naval Strategy

On what theoretical basis could such a role be based? The Tirpitzian dream of a *Weltmachtflotte* was now neither politically nor economically feasible, and a fleet based on cruisers and submarines and designed for *Kleinkrieg* had been prohibited by the Treaty of Versailles. Another approach to maritime strategy would be required. Raeder found it in the writings of a recognized and respected naval theorist, one who specialized in middle-power navies—Vice Admiral Raoul Castex of France.⁵⁹

Castex and the "Middle Ground." The theories of Castex, which were developed during the interwar period, were ideally suited to the German position as an inferior continental naval power. Castex, like Raeder, had "had to conceive a naval strategy by which a land power might deal with British naval superiority."⁶⁰ The key was to find a middle-ground strategy, between the fleet-action theory of Mahan and the Jeune École theory of Theophile Aube, which employed operational maneuver to create favorable tactical situations.⁶¹ Castex believed that it was not necessary to seek a Mahanian fleet action, rather that a limited tactical victory in a critical situation could "upset the balance" and win opportunities for maneuver. The benefits of winning even secondary objectives in secondary theaters "may exceed expectations and bring a success having major repercussions upon the principal theater, where all remains in doubt, even though the plan of maneuver has foreseen exactly the opposite."⁶² On this basis Raeder envisioned a useful role for the navy that the German government might be persuaded to accept. German defensive requirements for seapower had to be balanced against the undeniable need to go on the offensive against Great Britain. To resolve this seeming conundrum, as will be seen, Raeder would resort to an innovation not seen before in naval history.

Breadth and Scope. If Wegener focused almost exclusively on the North Sea, Raeder had an expansive view of naval warfare and the area over which it should be conducted. His conception of seapower was in fact global:

All naval theatres of war formed a homogenous whole and that consequently any operation must be viewed in its correlation with other sea areas. Accordingly, cruiser warfare overseas and operations by the battle fleet in home waters were integral components of a single naval strategy which, by exploiting the diversionary effect, sought to weaken the enemy's forces and to disrupt supplies.⁶³

That is, Raeder envisioned improving the odds locally through actions half the world away—an impressive grasp of the potential for the long reach of seapower. Raeder's frame of reference dwarfed Wegener's; this frame of reference underlay a chain of reasoning by which Raeder attempted to answer the fundamental question of how an inferior naval power could engage a superior opponent, something Wegener had not been able to do.

Range and Endurance. An active approach is necessary if maneuver opportunities are to be generated; the strategic-defensive of the Tirpitzian *Risikogedanke* could not produce them. Further, the geographical restrictions that Wegener perceived in the Great War and 1920s persisted in the 1930s; maneuver would require sea room and the endurance to exploit it. For Germany, then, endurance was a fundamentally limiting factor on the effectiveness of fleet forces. From the moment Raeder assumed command of the German navy, high endurance became a design goal for new Kriegsmarine warships.

During the interwar period, before underway refueling was perfected, the limiting factor of onboard fuel capacity caused naval influence to be regarded as regionally isolated, centered upon major bases with fuel bunkers: "While machine propulsion gave a new vigor and celerity to maneuver, the necessity of keeping the fleet supplied with fuel acted as a tether upon it."⁶⁴ It was accepted as a general principle that "a battle fleet lost efficiency in direct proportion to its distance from its base."⁶⁵ Moreover, for any nation considering cruiser warfare against Great Britain, the lack of a supporting network of bases was a crippling deficiency.⁶⁶ In the First World War, Germany's overseas possession had been insecure and could not be counted upon as naval bases. In response, the endurance of German warships was now substantially increased by the use of efficient diesel and high-pressure steam propulsion systems.

The Anglo-German Naval Treaty imposed Washington Treaty standards and excluded the innovative *Deutschland*-class *panzerschiffe*. Nonetheless, the exceptional endurance designed into that class was carried over into all subsequent warships, in part through large bunker capacity, an approach adopted from U.S. practice. Endurance would no longer dictate the functional roles that a

particular type of German warship could undertake. From destroyers to battle-ships, all warships would have the “legs” necessary to range widely and employ sustained high speed to tactical advantage.

German warship endurance during the early interwar period was double that of the First World War. Warships designed after 1938, when planning centered on action against Great Britain, had even greater endurance. The figures (detailed in table 1) point to an impressive and unmistakable increase in German naval capabilities. In part, they represent one of Raeder’s answers to Wegener’s “dead angle”—that is, to give warships the freedom to operate at high speed and still reach areas inaccessible to the old “short-legged” German navy. “With a fleet of this kind,” Heye was to agree, “we could indeed cause damage to the enemy,” even while defensive operations were limited to the Baltic Sea and coastal waters close to German-controlled territory.⁶⁷

TABLE 1
GERMAN WARSHIP ENDURANCE

Type	Pre-1938		Post-1938	
	Class	Endurance (nm)/ Speed (kts.)	Class	Endurance (nm)/ Speed (kts.)
Aircraft Carrier	<i>Graf Zeppelin</i>	8,000/19	—	—
Battleship	<i>Bismarck</i>	8,100/19	H	16,000/19
Battle Cruiser	<i>Scharnhorst</i>	10,000/17	O	14,000/19
Armored Ship	<i>Deutschland</i>	10,000/19	P	15,000/19
Heavy Cruiser	<i>Hipper</i>	6,800/19	—	—
Light Cruiser	<i>Leipzig</i>	5,700/19	Scout Cruiser	12,000/19
Destroyer	<i>Z-17</i>	4,800/19	<i>Z-52</i>	16,000/19
Torpedo Boat	1924	3,100/17	1939	5,000/19
Submarine	VIIA type	4,300/12*	IXA type	8,100/12**

* Increased to 6,500 nm in later versions of the class.

** Increased to 11,000 nm in later versions of the class.

Source: H. T. Lenton, *German Warships of the Second World War* (London: Macdonald and Jane’s, 1975).

ESCAPING THE “DEAD ANGLE”

German naval operations, then, were not to focus solely on either the offensive or defensive. Prewar British naval intelligence “credited German naval strategists with sufficient imagination to envisage an alternative to Tirpitz’s defunct programme of a symmetrical armaments competition.”⁶⁸ Royal Navy studies concluded that the greatest threat from the German surface fleet would be employment as single ships in a merchant-raider role to complement the efforts of the U-boats.⁶⁹ That no such concerted effort in fact developed early in the war was only because the resources of the Kriegsmarine were overburdened by that time.

The requirement for operational flexibility gave rise to what became known as the German “double-pole” strategy and also to the “Z Plan,” a shipbuilding program approved in the mid-1930s for the period 1939–48. The Z Plan

envisioned an eventual force of thirteen battleships and battle cruisers, four aircraft carriers, fifteen *panzerschiffe*, twenty-three cruisers, and twenty-two large destroyers.⁷⁰ Under the double-pole approach, single high-endurance warships would engage in distant operations against British commerce while two small but powerful battle groups, each formed around battleships plus a single aircraft carrier and screened by diesel-powered light cruisers and destroyers, maintained local sea control in the North and Norwegian seas.⁷¹ These proposed battle groups represented a major departure from conventional naval organization and operational concepts.

To address the material inferiority of the German fleet, Raeder drew upon the First World War initiatives of Hipper (in his battle-cruiser plan for the North Atlantic) and Admiral Reinhard Scheer to frame a modern, coordinated, functional organization. Scheer, who had commanded the High Seas Fleet at Jutland and died in 1928, had believed (as Castex was to observe) that naval operations should be “closely interrelated[,] . . . combined within a framework of coordinated operations” to heighten their chances of success.⁷² Specifically, Scheer’s attempts to coordinate mine, submarine, and zeppelin operations with surface fleet action now became the basis of Raeder’s approach. Raeder’s own analysis convinced him that along with coordination, the elements of speed and maneuver represented the future of naval warfare. However, he envisioned mixed task groups, not the single-type formations of the First World War, which he considered too inflexible to meet rapidly changing circumstances.⁷³ Germany began experimenting with small task forces of mixed ship types several years before the second war began.⁷⁴

These new mixed-type formations could fulfill several purposes. They could secure the local sea control needed to ensure the safe movement of Swedish iron ore through the Baltic and along the Norwegian coast. They could, by diversionary actions in the North Sea, facilitate movement of raiders in and out of German-controlled waters. In the same way, as dynamic “fleets-in-being,” they could divert Allied groups pursuing these raiders, or even make forays to hunt down the forces tracking German raiders. They might also find opportunities to attack convoys themselves. The Germans intended, through aggressive and wide-ranging operations against shipping, to force the British to implement a global scheme of convoys, in such numbers as to stretch Royal Navy escort and covering forces to the absolute maximum, creating exploitable opportunities for German surface forces.⁷⁵ Under such stress, Raeder predicted, not every convoy would be protected, and ocean convoy escorts would frequently be limited to single armed merchant cruisers that did little more than ensure navigational accuracy and send position reports—which proved to be the case.⁷⁶ Any such convoy encountered by a German mixed-type task force would be quickly destroyed.

MAP 2



The operational concept behind the Z Plan and double-pole strategy was not to seek set-piece engagements but to create secondary opportunities through maneuver that would help rebalance the odds of the primary naval conflict, being fought in the Atlantic. Until the impressive combat power they envisioned could be in service, the trap of the “dead angle” remained—that is, to engage the enemy in an area of strategic consequence, the Germans had to find a way to reach the Atlantic (see map 2). Mahan would have said that more bases were the solution. Wegener’s position that bases had to be secured by conquest was well known; he had advocated military expansion into Denmark and Norway.⁷⁷ Raeder set about trying to obtain the bases by diplomacy.

Forward Basing

Through the German naval attaché in Moscow, Raeder requested from the Soviet Foreign Minister Molotov, in return for technology to support its own ambitious fleet expansion plans, permission to establish a German naval base in the

Motovskiy Gulf, on the Barents Sea nearly adjacent to the Norwegian border. On 17 October 1939, the Soviets offered the use of Zapadnaya Bay, which empties into the Motovskiy Gulf: "In this bay, Germany may do whatever she wishes: she may carry out whatever projects she could consider necessary. Any type of vessel may be permitted to call there (heavy cruisers, submarines, supply ships)."⁷⁸ German ships could enter in any season and, as the bay was wholly surrounded by Soviet territory and closed to shipping, in complete secrecy. In this way Raeder devised a partial solution to the problem of geostrategic isolation that Wegener did not envision.

Understanding fully that the security of the leased Russian base, in a remote and undeveloped area, was tenuous at best, the Germans planned to sustain it by "afloat logistical support." Several merchant ships were taken up from trade and made suitable for repair, supply, accommodation, and command support tasks. Ultimately, three vessels were modified and assigned to the new base, which was given the code name BASIS NORD.⁷⁹

Clearly, in this a Mahanian battle-fleet action was not the object of Kriegsmarine planning; something more sophisticated and deadly was being contemplated. The concept of afloat logistics support was exploited to provide a freedom of action on a scale unprecedented in German naval history. It soon produced a revolutionary design for a fleet support ship that was decades in advance of every other navy in the world.

Underway Replenishment

Trials with underway replenishment began in 1928 with the chartered tanker *Hansa* from Atlantik Tank Reederei, of which two members of the Board of Directors were former naval officers. In spring and fall of both 1934 and 1935, fleet exercises experimented with refueling techniques. The British "stirrup method" of astern refueling with fueling hoses suspended from a towing hawser was trialed; the Germans concluded that it was impractical. In fall 1935, experiments with alongside refueling while under way were conducted between tankers and torpedo boats as well as between cruisers and torpedo boats. The trials used a system of towing alongside, reminiscent of the American Dinger-Nimitz system developed during the First World War, passing fuel oil, diesel fuel, and water hoses with booms and cranes. Although it was a demanding seamanship evolution, with practice the Germans found they were able to begin pumping about twenty minutes after the ship wishing to refuel began its approach alongside. During the Spanish Civil War, German ships frequently replenished at sea from auxiliary support ships, achieving fuel transfer rates of 120 tons per hour under operational conditions.⁸⁰

Having mastered the techniques, the German navy turned its attention to the characteristics of its auxiliary tankers, applying lessons from the fleet exercises and the Spanish Civil War. After testing two vessels of an intermediate type, the Germans produced a mature fleet supply ship (*trosschiff*)—the six-ship *Dithmarschen*-class, launched between 1937 and 1940.⁸¹ Five were commissioned; two of them, *Altmark* (later renamed *Uckermark*) and *Westerwald* (later *Nordmark*), were operational at the start of the war.⁸² (The sixth unit, *Havelland*, was launched in 1940 but was never completed.) They were innovative and effective ships that would play a major part in the subsequent development of replenishment at sea.⁸³

The *Dithmarschens* could each carry nearly nine thousand tons of fuel oil and four hundred tons of lubricating oil, as well as ammunition, spare parts, provisions, and water. They were equipped with repair shops, hospital facilities, and large boats used to transfer stores. They were also quite well armed, with three 150 mm deck guns, two 37 mm and four 20 mm antiaircraft guns, plus eight machine guns. These extra features reduced the liquid cargo that could be carried but added significantly to the diversity of support that could be provided. Twin shafts produced a top speed of twenty-two knots, enabling the *trosschiffe* to accompany warships in high-speed transits or outrun small patrol craft.⁸⁴ These flexible and capable multicargo supply vessels brought an ability to exploit the sea through the local use of naval power substantially closer to realization. A comparison between contemporary American and British oilers, and German *trosschiffe* is given in table 2.

The *Dithmarschens* were the longest and fastest tankers then in service with any navy. This length was necessary to achieve high speed. A coincident benefit of their streamlined hull form was exceptional fuel economy; 12,500 miles at fifteen knots, without expending cargo fuel. All this was necessary to support long-range commerce raiding operations that, as was known from the outset, would be furtive, gauntlet-running enterprises.⁸⁵ Most importantly, the *Dithmarschens* were equipped with an ingenious system of light but durable buoyant rubber hoses that could either be floated aft to a receiving ship for

TABLE 2
CLASS DATA FOR AMERICAN CIMARRON-CLASS, BRITISH DALE-CLASS, AND GERMAN DITHMARSCHEN-CLASS OILERS

Class	Length	Beam	Draft	Speed	Deadweight	Cargo
<i>Cimarron</i>	553 ft.	75 ft.	32 ft.	18 kts.	24,683 tons	19,725 tons
<i>Dale</i>	483 ft.	62 ft.	34 ft.	11.5 kts.	17,000 tons	12,000 tons
<i>Dithmarschen</i>	582 ft.	40.5 ft.	33.5 ft.	22 kts.	20,850 tons	8,980 tons

Source: Thomas Wildenberg, *Gray Steel and Black Oil: Fast Tankers and Replenishment at Sea in the U.S. Navy, 1912–1995* (Annapolis, Md.: Naval Institute Press, 1996), p. 275; Hans E. Nauck, "German WW II Naval Oilers," *Warship International* 33, no. 2 (June 1996), pp. 208–10; and Richard M. Anderson, "German Naval Oilers," *Warship International* 32, no. 1 (March 1995), p. 89.

astern refueling or “boomed out” to a ship alongside. Operational records and photographic evidence show that these and other classes of German support ships did in fact transfer all manner of liquid products and solid stores while making way at sea.⁸⁶

The Kriegsmarine employed supply ships from the first days of the war, ultimately using seven types.⁸⁷ *Altmark* departed Wilhelmshaven on 5 August 1939 for Port Arthur, Texas, loaded diesel fuel, and then supported the *panzerschiffe Admiral Graf Spee* and other German warships until 21 January 1940. *Westerwald* supported operations of the *panzerschiffe Deutschland* in the Norwegian Sea and Arctic Ocean between 22 August and 12 November 1939. It also refueled the disguised merchant raider *Widder* twice before departing for the central Atlantic.

The most remarkable example of the effectiveness of German operational logistics was the sortie by the battle cruisers *Scharnhorst* and *Gneisenau*, supported by six supply ships, for Operation BERLIN, which took place between 25 January and 22 March 1941. The patrol lasted sixty days and covered over 17,800 miles. The raiders were resupplied on six occasions, receiving 30,355 tons of fuel.⁸⁸ In that cruise the German battle cruisers used radar to good advantage, managing to evade in heavy weather British ships that were not similarly equipped, but they also used two *Dithmarschen*-class *trossschiffe*, *Ermland* and *Uckermark* (formerly *Altmark*), to widen their search front. In fact, *Uckermark* made the majority of sightings on 15 March that led to the capture or destruction of sixteen merchant ships, mostly tankers, totaling eighty-two thousand tons.⁸⁹ In total, twenty-two Allied cargo ships, amounting to 115,622 tons, were lost, and transatlantic shipping cycles were disrupted—Allied losses that exceeded those from any of the great wolf-pack convoy battles or cruises by single U-boats.⁹⁰ Admiral Raeder had achieved the aim of dispersing enemy escort forces, creating opportunities for other raider sorties, and disrupting the British war economy—at least this once. Without doubt, Operation BERLIN was the crowning moment of German surface naval operations.⁹¹

Advanced Steam Propulsion

To reduce dependence on fuel generally, German experience with diesel propulsion in high-performance hulls having been frustrating, German warship designers late in the interwar years attempted to follow an American movement to high-pressure steam. Admiral Kurt Assmann and Admiral Walter Gladisch, who both worked for many years in the historical section of the German Admiralty, would later recall that German naval architects were enthusiastic about the potential of the new high-pressure, superheated-steam systems.⁹² In the United States, the Secretary of the Navy in 1936 stated that the economical fuel

consumption achieved in the new *Mahan* (DD 364) class (with boilers that operated at four hundred pounds per square inch and 700°F), represented “the greatest progress the Navy had made in engineering in a generation.”⁹³ Despite its complexity, American marine propulsion machinery demonstrated extraordinary reliability under arduous conditions.⁹⁴ Meanwhile, British ships were plagued by steam leaks and oil leaks to a degree almost unknown in the U.S. Navy.⁹⁵ The German response was the *Z17*-class destroyer, which could in theory steam 4,800 miles at nineteen knots, carrying a bunkering of 760 tons.⁹⁶

In practice, however, the high-pressure steam propulsion systems in German destroyers and heavy cruisers did not prove as reliable as the leading-edge American technology. Prone to frequent breakdowns, the German high-pressure superheated systems never achieved design specifications and frequently delivered less than half the intended endurance.⁹⁷ This weakness eliminated German heavy cruisers and destroyers from Atlantic operations and made mobile logistical support all the more critical for the Kriegsmarine’s operational planners.⁹⁸ The Z-Plan ships necessarily fell back on diesel propulsion. However, that the Germans took the technical risk in even attempting to adopt the new, complex, and expensive steam systems reflects the seriousness of the Kriegsmarine’s attempt to achieve superior speed and endurance that could be exploited tactically for either offensive or defensive purposes.

“INDEED, IT WAS THE ONLY WAY”

The concept of “force multiplication” for a medium-power navy, in part by establishing forward bases of operation but more importantly by reducing its dependence on bases at all, represented a significant new departure in naval thought. The Wegenerian notion that naval power is tied to bases and position was weakened significantly by this development in mobile logistical support of sea warfare. The U.S. Navy would bring the “Fleet Train” to maturity in the Pacific theater, using oilers and supply vessels to achieve extraordinary reach and endurance, but part of the credit properly belongs to the German navy and to Erich Raeder.

The force structure goals of the Z Plan, to have been reached in the mid-1940s, were preempted by the outbreak of war, and the Germans were accordingly unable to implement fully the double-pole strategy. Nevertheless, the German navy was “perfectly clear” that its basic purposes were, first, to protect its own sea-lanes and, second, to attack the enemy’s.⁹⁹ Extensive defensive measures were implemented from the first days of the war to deny coastal waters to enemy forces and assert local control to protect strategic shipping. These commitments made the “knockout blow” anticipated by British naval intelligence a complete impossibility. Nonetheless, the Kriegsmarine set about a dynamic

program of dispersal in the hope of creating maneuver opportunities needed to exploit German material superiority at the unit level. This unconventional approach made capital ships, by virtue of their high endurance, into “super-cruisers” capable of conducting open-ocean trade warfare.

The result was an employment of German naval surface forces that ran counter to “traditional ideas on the subject,” one that “may well appear as a splitting up of forces—perhaps even ‘squandering’ of them.” But even after the war, German naval leaders were to be practically unanimous in the opinion that, given the circumstances, the approach was correct and reasonably successful—even, in specific cases, “very good.”

Indeed it was the only way of disposing these forces which could have had any chance at all of any successful and damaging attacks on the enemy. By this means they lent support to the U-boat warfare on enemy communications, forced the enemy to split up his forces, hampered or prevented him from concentrating his forces for major naval engagements, forced the enemy to confine his merchant shipping lines within very rigid limits, thereby causing frequent delays and difficulties in the transport of supplies, and in the case of U-boats tracking down convoys presented them with valuable and easy targets.¹⁰⁰

With limited resources, Raeder had designed a capable fleet and formulated a flexible naval strategy; given the spirit, intelligence, imagination, will, and knowledge of the officer corps, results out of proportion to the national investment were a real possibility. Better could not have been hoped for without a substantial change in government policy.

The fundamental differences in naval strategy between Admirals Raeder and Wegener corresponded, then, from their different perspectives from which they looked at the problem. Raeder was bound by national strategy, policy, and government economic and budgetary priorities. Wegener’s theories were limited by no such realities. Wegener steadfastly held to his notion that Great Britain and its domination over the world’s oceans stood in the way of German national greatness. In fact, however, as we have seen, German foreign and defense policy during the Weimar and, at least initially, National Socialist regimes was oriented not against Britain but against the threat of a combined Polish and French invasion. Naval issues were secondary, and Raeder had his minister’s instructions: “Base [naval] operational ideas more on political and military [i.e., land] realities.”¹⁰¹ The new and flexible approach to seapower strategy, warship design, and operational concepts that resulted would have been anathema to naval leaders of the Tirpitz era.

While Raeder repeatedly sought and received assurances from Hitler that war against Great Britain was not part of the grand plan, Wegener could see no other

outcome. He had declared in his 1929 book, "As long as England acts as an outpost of America, no European world can be established;"¹⁰² unrestrained by practicalities, he continued to press his theories, and in so doing distanced himself from his former crewmate and friend. Ultimately, Wegener's views left him alone and bitter; if his operational doctrines were now unrealistic, he had accurately foreseen the future enemy, and soon he saw his country engaged in the war that he had always maintained was unavoidable.

Raeder's often-quoted fatalistic declaration that the German surface forces were so weak that they could "do no more than show that they know how to die gallantly and thus are willing to create the foundations for later reconstruction" is overused and overplayed.¹⁰³ His conception of naval power was born of a philosophical construct other than the typical Anglo-American view, based on the writings of Mahan and Sir Julian Corbett, or even the German, Tirpitzian view of preceding decades. Raeder's innovative uses of seapower were actually early examples of asymmetric warfare. His theory that a broadly based attack on all the elements of maritime trade could be effective conforms to current views on the subject.¹⁰⁴ The use by the Kriegsmarine of operational logistics concepts to solve the Wegenerian problem of the "dead angle" was a "world first," one that has not received adequate recognition. In this sense, Erich Raeder pointed the way for all the middle-power navies that aspire to exercise seapower in distant waters.

NOTES

1. In 1902 and 1913, their standings for promotion to Oberleutnant zur See and Kapitänleutnant were practically identical. In 1913 Raeder ranked first overall, Wegener fifth.
2. For a general description of Wegener's career see the introduction by Holger H. Herwig to Wolfgang Wegener, *The Naval Strategy of the World War* (Annapolis, Md.: Naval Institute Press, 1989), pp. xv–xxvii.
3. Erich Raeder, *My Life* (Annapolis, Md.: Naval Institute Press, 1960), p. 13.
4. For a detailed description of the social importance of "crew" membership see Eric C. Rust, *Naval Officers under Hitler: The Story of Crew 34* (New York: Praeger, 1991), pp. 4, 19–20, 167.
5. See Holger H. Herwig, "The Failure of German Sea Power, 1914–1945: Mahan, Tirpitz, and Raeder Reconsidered," *International History Review* 10, no. 1 (February 1988), pp. 68–105; Keith W. Bird, "The Origins and Role of German Naval History in the Interwar Period 1918–1939," *Naval War College Review* 32, no. 2 (March–April 1979), p. 52; Gerhard Schreiber, "Italy and the Mediterranean in the Power-Political of German Naval Leaders, 1919–45," in *Naval Strategy and Policy in the Mediterranean: Past, Present and Future*, ed. John Hattendorf (London: Frank Cass, 2000), pp. 108–11; Tobias Philbin, *The Lure of Neptune* (Columbia: Univ. of South Carolina Press, 1994), pp. 33–37; Rust, *Naval Officers under Hitler*, p. 120.
6. Herwig, "Introduction," p. xxi.
7. Herbert Rosinski, "German Theories of Sea Warfare," *Brassey's Naval Annual* (1940), p. 40.

8. Wilhelm Diest, "Rearmament of the Individual Service, 1933–39," in *Germany and the Second World War*, ed. Militärgeschichtliches Forschungsamt (Oxford, U.K.: Clarendon, 1990), vol. 1, p. 471.
9. Bernard Brodie, *A Guide to Naval Strategy*, 5th ed. (Princeton, N.J.: Princeton Univ. Press, 1965), pp. 91–92.
10. Geoffrey Till, "The Battle of the Atlantic as History," in *The Battle of the Atlantic, 1939–1945: The 50th Anniversary International Naval Conference*, ed. Stephen Howarth and Derek Law (London: Greenhill Books, 1994), pp. 584–95.
11. Joseph A. Maiolo, *The Royal Navy and Nazi Germany, 1933–39: A Study in Appeasement and the Origins of the Second World War* (New York: St. Martin's, 1998), pp. 73–74. See also Joseph A. Maiolo, "Naval Armaments Diplomacy in Northern Waters: The Origins of the Anglo-Scandinavian Naval Agreement of 21 December 1938," in *Navies in Northern Waters, 1721–2000*, Rolf Hobson and Tom Kristiansen, eds. (London: Frank Cass, 2004), pp. 192–95.
12. Hill's theory described a conflict between national requirements and alliance commitments, each of which calls for different capabilities. In this case, the conflict was between the demands for offensive and defensive capabilities. J. R. Hill, *Maritime Strategy for Medium Powers* (Annapolis, Md.: Naval Institute Press, 1986), pp. 199–212.
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53. Hans-Erich Volkmann, "The National Socialist Economy in Preparation for War," in *Germany and The Second World War*, ed. Militärgeschichtliches Forschungsamt (Oxford, U.K.: Clarendon, 1990), vol. 1, pp. 356–57.
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55. Tobias R. Philbin, "Reflections on the Strategy of a Continental Commander: Admiral Franz Hipper on Naval Warfare," *Naval War College Review* 30, no. 2 (Fall 1977), p. 81.
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57. Philbin, "Reflections on the Strategy of a Continental Commander," p. 81.
58. Charles S. Thomas, *The German Navy in the Nazi Era* (Annapolis, Md.: Naval Institute Press, 1990), p. 25.
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For the Jeune École, see Erik Dahl, "Netcentric before Its Time: The *Jeune Ecole* and Its Lessons for Today," in this issue.
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65. Russell F. Weigley, *The American Way of War: A History of United States Military Strategy and Policy* (Bloomington: Indiana Univ. Press, 1977), p. 245.
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70. *German Naval History*, "Z-Plan," www.german-navy.de/kriegsmarine/zplan/. See also H. T. Lenton, *German Warships of the Second World War* (London: Macdonald and Jane's, 1975), pp. 22-23.
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72. Castex, *Strategic Theories*, pp. 157-60.
73. Raeder, *My Life*, p. 153.
74. Clark Reynolds, *Command of the Sea: The History and Strategy of Maritime Empires* (Malabar, Fla.: Robert E. Krieger, 1983), vol. 1, p. 490.
75. Thomas, *German Navy in the Nazi Era*, p. 188. See also Jak P. Mallmann Showell, *Fuehrer Conferences on Naval Affairs, 1939-1945* (London: Greenhill, 1990), pp. 34, 37-38.
76. John Winton, *Convoy: The Defence of Sea Trade, 1890-1990* (London: Michael Joseph, 1983), p. 127. See also Peter Gretton, *Convoy Escort Commander* (London: Cassell, 1964), p. 50.
77. Herwig, "Introduction," p. xxxi.
78. Quoted in Philbin, *Lure of Neptune*, p. 83.
79. *Ibid.*, pp. 88-94.
80. Paul Zieb, *Logistische Probleme der Marine* (Neckargemünd, W.Ger.: Scharnhorst Buchkameradschaft, 1961), pp. 83-85.
81. By 1942, the Kriegsmarine had seven categories of fleet support ships, although the *Dithmarschen* class remained the most capable of the type. Jak P. Mallmann Showell, *German Navy Handbook, 1939-1945* (Phoenix Mill, U.K.: Sutton, 1999), pp. 123-25.
82. For a descriptive history of the operations of *Westerwald/Nordmark* see Geoffrey P. Jones, *Under Three Flags: The Story of Nordmark and the Armed Supply-ships of the German Navy* (London: Corgi Books, 1975).
83. At the end of the war, *Dithmarschen* and *Nordmark* were surrendered to the U.S. and Royal navies, respectively. *Dithmarschen* was commissioned into the U.S. Navy as USS *Conecuh* (AO 110) and became the test platform for experimentation with multicargo replenishment ships, from which the current forms of the replenishment oiler (AOR) type were derived. For a detailed account of the German origins of the AOR concept, see Thomas Wildenberg, *Gray Steel and Black Oil: Fast Tankers and Replenishment at Sea in the U.S. Navy, 1912-1995* (Annapolis, Md.: Naval Institute Press, 1996), pp. 204-16.
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85. H. J. Reinicke, "German Surface Force Strategy in World War II," U.S. Naval Institute *Proceedings* 83, no. 2 (February 1957), pp. 182-84.
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88. Peter Handel-Mazzetti, "The *Scharnhorst-Gneisenau* Team at Its Peak," U.S. Naval Institute *Proceedings* 82, no. 8 (August 1956), pp. 852–60. See also Stephen W. Roskill, *The War at Sea, 1939–1945* (London: Her Majesty's Stationery Office, 1956–61), vol. 1, p. 373; and Rhys-Jones, *Loss of the Bismarck*, pp. 40–70. Roskill indicates "at least five ships" were employed, while Handel-Mazzetti says "no fewer than nine supply ships." Rhys-Jones tends to confirm Handel-Mazzetti. It seems likely that six different ships (*Adria*, *Schlettstadt*, *Esso-Hamburg*, *Friedrich Breme*, *Ermland*, and *Uckermark*) conducted a total of nine refueling operations at six different positions.
89. Rhys-Jones, *Loss of the Bismarck*, pp. 65–66.
90. In March 1943, convoy ON-166 lost fourteen ships totaling 87,901 tons to attacks by nineteen U-boats ("Greatest Convoy Battles," *U-boat Net*, uboot.net/ops/convoys/battles.htm). *U-107*, commanded by KptLt. Günther Hessler, sank fourteen ships totaling 86,699 tons on a single patrol between March and July 1941 ("The Most Successful Patrols," *U-boat Net*, uboot.net/ops/top_patrols.htm).
91. Roskill, *War at Sea*, p. 379.
92. Kurt Assmann and Walter Gladisch, "Aspects of the German Naval War," in *Essays by German Officers and Officials on World War II*, roll 1 (Wilmington, Del.: Scholarly Resources, n.d.), p. 1.
93. John Anderson Miller, *Men and Volts at War: The Story of General Electric in World War II* (New York: Whittlesey House, 1947), p. 15.
94. Franklyn E. Dailey, Jr., *Joining the War at Sea, 1939–1945*, 6th ed. (Wilbraham, Mass.: Dailey International, 2002), pp. 32–34.
95. David K. Brown, *The Design and Construction of British Warships, 1939–1945: The Official Record* (Annapolis, Md.: Naval Institute Press, 1995), vol. 1, p. 11.
96. In comparison, contemporary British fleet destroyers from the A class to the I class had a bunkerage capacity of approximately 470 tons. Lenton, *German Warships of the Second World War*, p. 71; M. J. Whitley, *Destroyers of World War Two: An International Encyclopedia* (London: Cassell, 2000), pp. 97–111.
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99. Boehm, "The War at Sea," pp. 5–6.
100. Schniewind and Schuster, "German Conduct of the War at Sea," pp. 15–16.
101. Wilhelm Deist, "The Rearmament of the Wehrmacht," in *Germany and the Second World War*, ed. Militärgeschichtliches Forschungsamt (Oxford, U.K.: Clarendon, 1990), vol. 1, pp. 388–91.
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103. Showell, *Fuehrer Conferences on Naval Affairs*, 38.
104. Vego, *Naval Strategy and Operations in Narrow Seas*, p. 226.

NET-CENTRIC BEFORE ITS TIME

The Jeune École and Its Lessons for Today

Erik J. Dahl

The story is a familiar one to students of military technology and transformation: a visionary military officer—a vice admiral—offers a new concept of how his navy, and his nation, will fight wars of the future. He suggests that smaller, faster forces, networked by new technology and following the latest ideas of business and economics, could replace in part the large, expensive military forces currently in use. His ideas resonate with many but generate opposition from others, and they are debated in military journals and even in the press. Finally the country's political leaders decide to support his ideas, and he is appointed to a more senior post and given the opportunity to put his vision into practice.

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This story applies to the U.S. military today, in connection with the concept of network-centric warfare (NCW). Originally developed by Vice Admiral Arthur K. Cebrowski, U.S. Navy (President of the Naval War College from 1998 to 2001), it remains one of the leading visions for the transformation of warfare. After retirement, and until recently, Admiral Cebrowski served as Director, Office of Force Transformation for the Department of Defense. But our story also applies to the French Navy in the late 1800s, when the revolutionary ideas of Vice Admiral Hyacinthe-Laurent-Theophile Aube produced a school of thought known as the *Jeune École*, or “young school.” Aube was appointed Minister of Marine in 1886, and although his time in office was relatively short he left behind a

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legacy of innovation and controversy that changed the French Navy for decades to come.

Network-centric warfare and the Jeune École represent innovative approaches toward the transformation of warfare, and both have been cited as examples of the type of thinking that can lead to revolutions in military affairs (RMAs). Both have also been charged with many of the same failings, such as an overemphasis on technology and excessive focus on tactical applications. Few historians or analysts have drawn a comparison between the two schools of thought, and although NCW advocates often cite historical parallels, they have not attempted to compare their innovations today with those of the French Navy more than a century ago. In fact they are unlikely to do so, because the Jeune École is often described as an example of how *not* to conduct a military transformation—too much technology, some critics charge, and not enough Clausewitz.

But this disparaging conventional view is overly simplified, and the Jeune École deserves more attention than it has been given. This article argues that the Jeune École can best be understood as a revolutionary concept of warfare that was well ahead of its time. Its leaders were wrong about many things, yet when we look closely at their ideas we see a remarkable resemblance to some of today's innovative visions of information-age warfare, and to network-centric warfare in particular. It is not too much to say that the Jeune École was the network-centric warfare of its time.¹

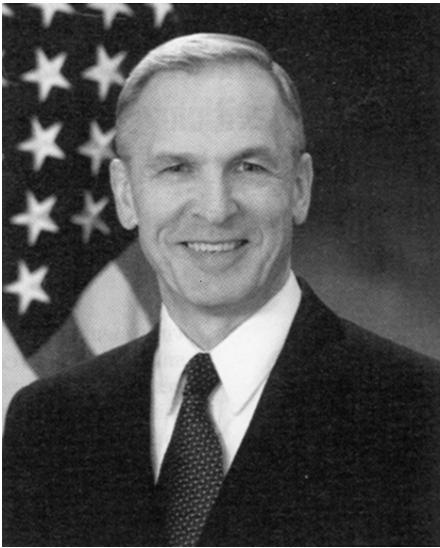
The story of the Jeune École's rise and fall holds important lessons for military transformation today, and its swift decline in particular represents a cautionary tale for NCW advocates. Yet just as the reasons for the Jeune École's failure have been misunderstood, so have its implications. The Jeune École failed for many reasons, but primarily because it attempted to do too much, was unwilling to accept criticism or allow dialogue, and misjudged the pace of change in warfare. Today's advocates of military transformation and revolution sometimes exhibit similar failings.

This article first reviews present-day thinking about the Jeune École among military writers and strategists. It then examines the school's origins, how it attempted to change the French Navy, and why it fell abruptly from power. Next it describes how the reasons for the school's fall have been misunderstood and why those reasons are relevant today. We will then compare the Jeune École with the concept of network-centric warfare and conclude by considering what lessons this comparison holds for the concept of NCW and, more broadly, for American defense transformation.

TWO SCHOOLS OF THOUGHT

History has not been kind to the *Jeune École*; historians of the French Navy have generally neglected it, while scholars of technology and military affairs typically give it little credit for innovative thinking or positive influence. One historian, for example, writes dismissively of Vice Admiral Aube that his mind “was running along a very old track.”² Another scholar, assessing the impact of technology on naval operations in the latter half of the nineteenth century, has only this to say: “The *Jeune École* in France deployed the most radical logic, but it was not matched by performance.”³

If commentators today agree that the *Jeune École* was a failed attempt at a revolution in military affairs, they disagree over what caused that failure and what lessons, if any, it holds for contemporary military planners. Two schools of thought can be seen in the literature. The first, and predominant, view holds that Aube and his followers were misguided in their overemphasis on technology; it



Vice Admiral Arthur K. Cebrowski, USN (Ret.)

sees the movement as an anomaly, with nothing positive to teach today's military. The second school of thought is that the *Jeune École* offered truly valuable and innovative ideas but that for technical, tactical, and strategic reasons they could not be implemented—that it was, in effect, an RMA before its time.

Milan Vego, one of the few scholars to make an explicit comparison between the *Jeune École* and NCW, has expressed the first view. For Dr. Vego, who is critical of network-centric warfare for placing too much emphasis on tactics and technology, “NCW bears a striking resemblance to various discarded theories of war fashionable over the last two centuries.”⁴ Like NCW, he writes, the *Jeune École* emerged as a response to rapid technological changes in warfare and espoused the netting of naval forces (in its case,

through the telegraph and signal stations). Aube mistakenly felt that technology made moral factors irrelevant; many of his ideas, such as about torpedo boats, did not work; and he and his followers tried fruitlessly to make up for their mistakes with complex mathematical models. The result, in this view, was decades of disarray for the French Navy.

James J. Tritten is also critical of the significance of the *Jeune École*: “The *Jeune École* did not represent mainstream naval thought and should be interpreted as a temporary sidetrack resulting from the introduction of, and opportunities afforded by, new technologies in an austere fiscal environment.”⁵ Michael Vlahos sees the *Jeune École* advocates as technocrats, unable to see the

big picture while they pushed for their favorite project, the torpedo boat: “Aube’s and Charmes’ promotion of the wrong weapons resulted in the utter stagnation of the French navy.”⁶

Stephen Biddle is the primary theorist to make the considerably less popular case that the *Jeune École* was revolutionary but premature. Biddle has described the *Jeune École* as an example of a military that attempted too much radical change, too fast, and so failed to achieve a revolutionary effect.⁷ For him, the *Jeune École*, European air-warfare visionaries before World War I, and the U.S. Army pentomic division experimenters of the 1950s “all represent visionary, forward-looking thinkers who decided a revolution was at hand when it was not.”⁸

Biddle’s view is most definitely in the minority, however, and the consensus among historians and strategists is clear—that the *Jeune École* placed its bets on the wrong technology and tactics, primarily on the torpedo boat over the battleship, and neglected the moral, strategic, and human dimensions of warfare. Its effect was to reduce French naval readiness dramatically, and its only legacies for today are warnings against making the same mistakes again. But as the history of the *Jeune École* will show, this consensus view is based on an insufficient understanding of Aube and the school he founded.

TECHNOLOGICAL CHANGE AND STRATEGIC UNCERTAINTY

The middle of the nineteenth century was a time of great change in naval warfare, driven largely by technological innovation.⁹ Not all of the military changes of the period, of course, were specific to navies, and not all were driven by technology; new ideas in economics and politics, such as social Darwinism and imperialism, were making their marks in land warfare as well as naval theory. The greatest driver of change was technology unleashed by the industrial revolution, and those advances tended to affect navies more rapidly than armies. Every generation, it seemed, new technologies threatened to make obsolete all previous ship designs.¹⁰

Sir Nathaniel Barnaby, Britain’s leading naval shipbuilder, wrote in 1876 about the technological uncertainty of the age: “The introduction of the screw propeller into the Navy in 1844 made a magnificent Navy obsolete; the realization of the terrible effects of shell fire in 1854 again rendered our grand screw line-of-battle ships and frigates things of the past.”¹¹ The greatest technological development was steam propulsion, which made ships independent of the wind and gave them much greater speed—especially with the later addition of the steam turbine. Other changes affected naval armor and ordnance. These developments led to confusion in naval tactics, with some strategists predicting that future naval warfare would be chaotic, characterized by melees, but others

believing that new tactical formations and weapons would actually make war at sea more orderly than it had been.¹²

But despite these dramatic changes, seapower played little part in the European wars of the mid-nineteenth century, and the general opinion was that the next war would follow the same pattern. Many—not just in France, but throughout Europe—supported the traditional army view that “sea power was a matter concerning trade and colonies and that, at best, it had only a secondary role to play in the relations of the great European states.”¹³

By the 1870s the French Navy, in particular, faced a problem. During the Franco-Prussian War of 1870, which had ended in the downfall of the French empire, the Navy had found itself unable to bring its power to bear. Although the French Navy was much larger than the German fleet, a combination of poor planning, lack of amphibious capability, and operational mistakes meant that the French had been unable to achieve their wartime objectives of destroying the



Vice Admiral Theophile Aube

German ironclads, blockading the German coast, and landing an army corps. Instead the German fleet remained in port, and the French were only able to mount an ineffective attempt at a blockade. Despite its failures at sea, the Navy did contribute to the war: naval officers and men served on land to help defend Paris. Thus the Navy emerged from the war in the strange position of having failed in its primary duty but having won the admiration of the French population.¹⁴ But popularity did not translate into large budgets, as much of the public regarded the Navy as an expensive luxury compared to the Army, leaving the service in a precarious financial situation.

Some French naval officers began to look toward new concepts of warfare and technology. They were inspired by the success during the American Civil War of the Confederate raider *Alabama*. As a leading scholar in the field recounts, “in a twenty-one-month cruise covering much of the globe, this comparatively weak steamer with auxiliary sail power took more than sixty prizes.”¹⁵ The *Alabama* and other raiders did not succeed in breaking the Union blockade of the South or in significantly interrupting the sea communications of the North, but they did have enormous influence on naval thinkers of the time. Britain in particular appeared to be a prime target for such a strategy of commercial warfare, having become, since the elimination of its Corn Laws (protectionist measures restricting the import and export of grain), highly dependent on maritime commerce for food and raw materials.¹⁶

Another key factor in naval thought at the time was the development of the independently running, or “automobile,” torpedo. Torpedoes until that time

had been mostly fixed weapons, essentially what are today called naval mines. Early automobile torpedoes began as small, petroleum-burning steamboats guided by ropes from the shore. Robert Whitehead, an Englishman working in Austria, greatly improved on the idea: he eliminated the ropes, replaced steam with compressed air, and made the torpedo an underwater weapon by creating a “balance chamber” that enabled it to stay at a constant depth.¹⁷ By 1871 most of the European powers had begun to adopt his invention.

These developments attracted the attention of Captain Baron Louis-Antoine-Richild Grivel, the ideological forefather of the *Jeune École*. Grivel wrote a book in 1869 describing how new technology and inventions could help make commerce raiding (*guerre de course*) an effective anti-British strategy. The orthodox view among French naval officers at that time was essentially Mahanian, holding that only the clash of arms at sea could be decisive; this, Grivel argued, was not the right approach for France to take against England.¹⁸ These ideas were taken up by Vice Admiral Aube, who would become the leader of a new school of naval thought.

Aube had spent most of his career on overseas stations and as a result had developed an outlook focusing on the defense of overseas interests and commerce. In a series of articles written in the 1870s, he began developing a naval strategy based on a new concept of warfare—that the object of war was to do the greatest possible harm to the enemy. This, wrote Aube, was to be accomplished by destroying the enemy’s national wealth; the destruction of the enemy’s battle fleet was by itself unimportant. The real wealth of Britain, specifically, was in its commerce, much of which was carried by merchant ships, so the prime aim of naval warfare against it was to destroy its merchant ships with commerce-raiding cruisers and torpedo boats. As Aube later wrote, “To destroy England’s fleet would be to humble her pride, but the way to make war on England is to sink the ships that bring the English their bread, meat and cotton and enable their workers to earn their living.”¹⁹

Aube was strongly influenced by the many new scientific ideas that were being discussed throughout Europe in this period. His call for unrestricted torpedo-boat warfare, for example, reflected a Darwinian contempt for the rule of law at sea.²⁰ Another new idea that appealed to Aube was the division of labor, which suggested it was a bad idea to put too much of the fleet’s power into a relatively small number of large battleships. He encouraged experimentation and the development of new ideas that ran counter to prevailing military doctrines. One such promising idea, he believed, was that the key to success in a future war would be a sudden, coordinated attack by a large number of small, torpedo-equipped ships and larger cruisers against the enemy’s commercial shipping—a blow that, along with bombardment of coastal cities, would create panic and

social collapse. In a widely quoted passage, Aube described the actions of his torpedo boats:

Tomorrow war breaks out; an autonomous torpedo boat—two officers, a dozen men—meets one of these liners carrying a cargo richer than that of the richest galleons of Spain and a crew and passengers of many hundreds. . . . The torpedo boat will follow from afar, invisible, the liner it has met; and, once night has fallen, perfectly silently and tranquilly it will send into the abyss liner, cargo, crew, passengers; and, his soul not only at rest but fully satisfied, the captain of the torpedo boat will continue his cruise.²¹

The Navy split in two over these radical ideas; Aube's followers became known as the new, or young, school, while old-school traditionalists—the *Vielle École*, or to one German scholar, the *Alte Schule*—advocated continuing emphasis on sea battle and blockade.²² The traditionalists were not necessarily unreasoning reactionaries; the old school wanted to connect the new with the old; “Continuity, evolution was its program, not revolution.”²³ The admirals who opposed the *Jeune École* did not like publicity, which put them at a disadvantage, because the struggle between the young and old schools was fought primarily in the press and parliament. Politicians were attracted to Aube's ideas because they offered significant economies. A liberal deputy, Etienne Lamy, produced a far-reaching report on the naval budget of 1879 in which he praised Aube's ideas and argued that battleships were too expensive:

The construction of battleships is so costly, their effectiveness so uncertain and of such short duration, that the enterprise of creating an armored fleet seems to leave fruitless the perseverance of a people. In renouncing warfare between battle fleets, a nation does not abdicate if it can produce, after having ensured the defense of its coasts, ships with powerful engines and strong artillery, able to remain at sea for an extended time, and destined for commercial war.²⁴

The *Jeune École* attracted support from politically minded journalists, as well as from younger officers who had been embittered against their seniors by the slow rates of advancement as the French Navy transitioned from a large fleet of sailing ships to a smaller one dominated by ironclads. Most notable among the journalists was Gabriel Charmes, a brilliant young writer and student of foreign affairs. Charmes knew little of naval matters, but he and Aube became close friends and colleagues—so close that “it is impossible to distinguish between the ideas of the two men.”²⁵ Charmes would eventually—before his early death—develop tactical ideas of his own, most notably that of the *bateau-canon*, a gunboat built like a torpedo boat but armed with a single gun. He supported the idea that the battleship violated the principle of division of labor: “The principal vice of ironclads is the attempt to combine in them at one time all of the means of

naval warfare: the ram, the gun, and the torpedo. The result is that they are not really suited to use any of them.”²⁶ Charmes was the primary advocate of the Jeune École in the press, frequently stressing the political nature of its reforms: “It will be the reign of justice succeeding that of favoritism, it will be equality replacing privilege.”²⁷

The debate between the reformers and traditionalists became heated and extreme, with no compromise possible. Advocates for the Jeune École, for example, did not speak simply of torpedo boats but of “democratic torpedo boats”; anyone opposing them was opposing democracy itself.²⁸ Aube was given his chance on 7 January 1886, when he became Minister of Marine—an appointment made more for political reasons than on the perceived merits of Aube’s naval ideas.²⁹ Whatever the reasons, “for a short space of a year and a half, the dream came true; the philosopher was king; ideas could really be put into practice.”³⁰

THE JEUNE ÉCOLE IN POWER

Aube soon found that not all of his theories translated well into practice. The first idea to be put to the test was that of the autonomous torpedo boat. In February 1886 he sent two torpedo boats from Cherbourg to Toulon, in order to test their independent cruising endurance at sea. The crews were so shaken up by the trip that they would have been unable to fight. One sailor later recalled that the weather forced them to subsist largely on sardines:

As a rule, we lived on ham, sardines, and tinned soups; for most of the time the weather was so rough that it was as much as we could do to get a little water boiled. We had a table about eighteen inches wide, but there was no point in laying it, for nothing would stay on it. The usual plan was for one man to hold the sardine tin while the other picked out sardines by their tails and transferred them to his mouth.³¹

From then on it was agreed that torpedo boats would have to be used for coastal defense. As has been pointed out, this should not have been a surprise to the Jeune École: “Charmes should have been able to make for himself the astounding discovery that a 33-meter boat was not yet an Atlantic liner.”³²

Other experiments, however, showed that the torpedo boat could fire a torpedo at a moving battleship, and in May and June 1886 Aube tested this concept in the first French naval maneuvers of modern times. A Jeune École–style fleet of some twenty torpedo boats, supported by three cruisers and a coastal-defense battleship acting as mother ship, faced an “attacking” fleet that included eight battleships. It was to be a battle of microbes against giants, wherein many small, specialized boats would take on ironclads according to the division-of-labor principle. The torpedo boats failed to prevent the battleships from

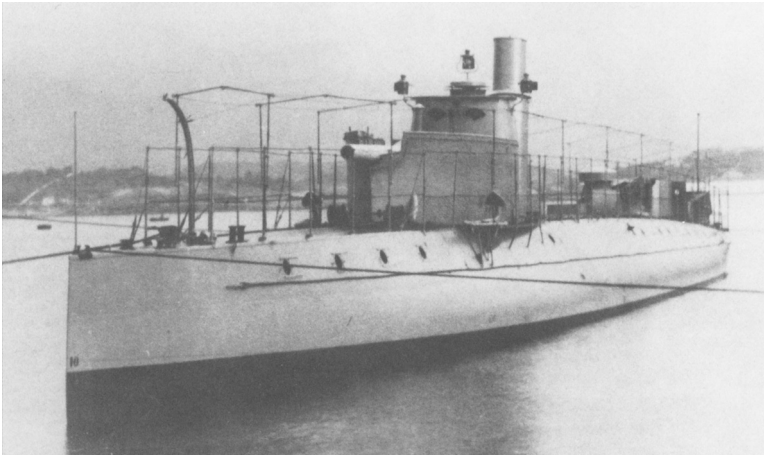
“bombarding” the port of Toulon, but when the attackers established a blockade, the boats were judged to have “sunk” most of them—an important result, as a fundamental part of Aube’s theory held that close blockade by a large fleet could be made impossible.³³ Overall, however, these exercises did not show torpedo boats to be as successful as the Jeune École had hoped. In December 1886 Aube settled on a revised, three-pronged strategy: offense in the Mediterranean, with the entire battle fleet concentrated at Toulon against Italy; defense in the Channel; and commercial warfare in the Atlantic.³⁴

Another idea that proved unsatisfactory was Charmes’s project of fast gunboats, the *bateaux-cannons*. The first of these was launched in April 1886; it was named for him after his death at thirty-six of tuberculosis, soon after Aube came into power. It was equipped with a 5.5-inch gun, intended to support attacks by torpedo boats. But its sea trials in 1887 presented the Jeune École with another setback. The boat proved to be a very unstable platform; the *Gabriel Charmes* could not hit anything. The planned construction of fifty additional *bateaux-cannons* was scrapped, and the *Charmes* lost its gun, after which it was ignominiously redesignated simply *Torpedo Boat 151*.³⁵

Aube’s work with torpedoes and torpedo boats is his best-known innovation, but he also initiated a number of other projects, such as experiments with oil fuel

and the initial Navy trials of the high-explosive melinite shell, which had been adopted in the French Army for bombardments and which Aube proposed to use against battleships and Italian cities. One far-sighted innovation that Aube supported came to fruition, but not in his lifetime—the submarine.

Two months after be-



The Fast Gunboat *Gabriel Charmes*

Source: Naval Historical Center

coming minister, he opened an official competition for designs for a submarine, a process that ultimately led to the construction of France’s first viable underwater craft, the *Gymnote*.³⁶

Many of his projects could not be completed, because Aube fell from office in May 1887 in a political reshuffle. In poor health, he retired to the country and ceased to be active in the movement he had founded. By this time most of the other Jeune École creators had also disappeared from the scene: Charmes

was dead, and Grivel had died as well, in 1882. With Aube gone, “there disappeared the last with the ability to keep it from degenerating into a mere naval faction.”³⁷ The debate between reformists and conservatives became instead one between radicals and reactionaries; to the end of the century the French Navy was torn by bitter debates among officers, in the press, and in parliament.

The result was a lack of strategy and vision for the Navy, the poor condition of which was finally revealed in the Fashoda crisis of 1898, which arose after a colonial expedition raised the French flag at the town of Fashoda, on the Nile, despite warnings from the British against such an act. Soon a British army under Lord Kitchener arrived. France and Britain came close to war, but the French were forced to back down when they realized that their navy—which was derisively described as a “fleet of samples”—was no match for the British.³⁸

Even after the crisis, supporters of the Jeune École program continued to argue in favor of it; one journalist declared in 1900, for example, that if Aube’s “ideas had been followed, if his plan had been executed, France would be at this moment the greatest naval power in the world.”³⁹ But after Fashoda a movement for moderation began to gain strength among the Jeune École and the traditionalists. A coherent naval strategy emerged in 1900, under the ministry of Jean-Louis de Lanessan, who was part of a cabinet intended to heal the wounds of a much larger struggle, the Dreyfus Affair. This strategy represented “the beginning of an official realization that public (and parliamentary) opinion was generally right in matters of administration and generally wrong in matters of naval strategy and building programs.”⁴⁰ A middle ground developed in terms of both naval construction and strategy, as Vice Admiral François-Ernest Fournier supported a fleet containing both battleships and cruisers, prepared to conduct either a traditional war on the high seas or a campaign against commerce.⁴¹

Naval stability would have to wait, because the Jeune École was destined to come back to power one last time. In 1902, the radical politician Camille Pelletan became Minister of Marine. Pelletan—who, attempting to stamp out all vestiges of aristocracy in the Navy, suppressed dress uniforms for officers and gave ships good “republican” names like *Justice* and *Liberty*—favored pet projects that frequently ran counter to common sense as well as the wishes of the naval establishment. “Pelletan faithfully based his administration on the worst of the Jeune École ideas of the 1890s: that the welfare of the arsenal workers, the common sailors, and the republican officers was more important than the welfare of the navy as a whole.”⁴² The Pelletan ministry came under widespread criticism and eventually was succeeded by a wider consensus and spirit of compromise in naval affairs, but while it lasted his tenure solidified the negative image of the Jeune École for posterity.

In its wake, the Jeune École appears to have left behind little but discord and a series of failed, if well intended, experiments. Many of its tactical and technological innovations were quickly overtaken by other developments in naval warfare. The development of torpedo nets and electric searchlights made battleships less vulnerable to torpedo attack, and improved propulsion and rapid-fire guns gave larger ships the speed and firepower needed to counter the torpedo-boat threat. Smokeless gunpowder eliminated the artificial “fog of war” upon which torpedo boats depended to close in on larger warships.⁴³ By 1890 most navies were building battleships again, and the ideas of Alfred Thayer Mahan became popular in France as well as in much of the rest of the world. The enthusiasm for the latest technology had been largely overtaken by a return to the older military principles of Clausewitz and Jomini.⁴⁴ Just as important, the strategic environment had changed. Britain was beginning to look more like an ally than an enemy, whereas against any enemy but England, France would need a traditional navy, able to engage enemy fleets at sea.⁴⁵

RETHINKING THE JEUNE ÉCOLE

There is no doubt that the school of thought begun by Aube failed in its attempt to reform the French Navy and that the debate over the Jeune École sparked several decades of bitter debate that left the service far weaker than it been. But many of the criticisms that have been directed against the school are misguided. The Jeune École deserves another look from history and from military thinkers today; advocates of network-centric warfare have as much to learn from its strengths as from its weaknesses.

Historical Anomaly or Culmination of Innovative Tradition?

First, although it is frequently treated as if it were a historical anomaly—a simple mistake sparked by misguided enthusiasts—the Jeune École actually represented the continuation and culmination of decades of French naval technological innovation in the early and middle 1800s. As early as the 1820s, French naval officers had embraced the notion that technology would be the key to any successful challenge to Britain’s naval position. Andrew Krepinevich, a prominent scholar in the field of military innovation, has described how the French Navy led the way early in what he calls the “Naval Revolution,” pioneering the adoption of steam propulsion and screw propellers in 1846, launching the first high-speed, steam-powered ship of the line in 1851 and the first seagoing iron-clad fleet in the late 1850s.⁴⁶ The government, rather than the private sector, funded much of this early experimentation, and this pattern continued into the Jeune École era with the torpedo boat in the 1880s and the submarine in the 1890s.⁴⁷ The Jeune École, then, might be considered the ultimate expression of

naval technological innovation, in the most innovative navy, in what was until that point the most innovative period in naval warfare ever seen.

Who Was Responsible?

Second, the creators of the Jeune École should not bear full responsibility for the poor state to which the French Navy fell by the turn of the century. The decline was largely brought about by politicians and polemicists in the press who hijacked the naval reform movement, and it was also the result of problems in French naval administration that preceded the Jeune École.

It does appear, however, that the collaboration between Aube and Charmes was ultimately detrimental to the Jeune École's reputation, for Charmes went beyond what Aube had recommended. The historian Paul Halpern, citing contemporary sources, writes that it was Charmes who introduced the concept of "division of labor" into the Jeune École argument and distorted the school's doctrine in favor of an extreme advocacy of the torpedo boat and, especially, the *bateau-canon*.⁴⁸ Theodore Ropp, a leading scholar in the field, agrees with this negative assessment of Charmes's influence: "The incredibly doctrinaire—and incredibly French—character of the debate was at least partly due to Charmes. Like most French journalists, he believed that all things could be solved by argument, if only the polemic was violent enough."⁴⁹

Nonetheless, and while Charmes can be considered more radical than Aube, neither of the school's founders took the debate to the extremes to which it degenerated later. One historian, Stephen Roberts, suggests that there existed in effect two Young Schools: the teachers who developed the theories, especially Aube and Charmes, and the disciples who adopted and used them because they found them useful in the political and social struggles of the day. After Aube fell from office and Charmes died, Roberts wrote, "the Naval Young School of Aube and Charmes soon died out, but the political Young School remained to plague the Navy through the 1890s."⁵⁰ In the 1890s the political Young School took the Jeune École to an illogical extreme, focusing entirely on the building of a fleet of hundreds of torpedo boats for coastal defense and denying completely the need for any high seas fleet—which Aube had never intended.⁵¹

This distortion of Aube's original ideas reached its peak (or nadir) under the ministry of Camille Pelletan, whom Roberts describes as "the most violent member of the political Young School."⁵² If the commentators of the time are to be believed, the Jeune École certainly did deserve the blame for the chaotic and unready state of the French Navy at the beginning of the twentieth century. For example, Theophile Delcasse, the French minister of foreign affairs from 1898 to 1905, proclaimed, "Thanks to Camille Pelletan, we no longer have a fleet."⁵³ But the policies of Pelletan were not the same as those of Aube, and it is important to

separate the ideas of the true Jeune École from those of the individuals who later took on its mantle.

Moreover, the poor condition of the French Navy cannot be blamed completely on either the original Jeune École or its later followers, for the service at that time suffered from long-standing problems of poor administration and meddling by government. It was chronically disorganized, often in the throes of reorganization at the behest of politicians who may not have known much about what they were doing. As one observer wrote in 1913, "The navy is a department of generally organized disorder."⁵⁴ Tritten puts it this way: "The history of the French navy is one of mismanagement by governments who *could* have known better."⁵⁵

Halpern argues that although the French Navy had a good technological base, it suffered from an administrative organization notorious for complexity and red tape: "These organizational difficulties would by the turn of the century inflict great harm on the navy, offsetting the potential advantages that might have been derived from the imaginative or technically daring constructors. The French, in summary, did not manage technology well and the French Navy would pay the price."⁵⁶ It may be that the failure of the Jeune École was at least in part a result, and not a cause, of poor administration in the French Navy of that period.⁵⁷

Foolish, Inflexible, and Fixated on Technology?

The Jeune École has often been charged with many of the same faults that critics see in network-centric warfare, but the view we have today of the Jeune École largely reflects the later interpretations of radical politicians and others. While its leaders have been caricatured as extremist, inflexible, and even perhaps a bit foolish, this was certainly not the perception among other navies at the time. Aube, in particular, was a much more flexible and innovative thinker and leader, often willing to compromise and experiment, than he is now often made out to be.

Despite its focus on technology, the Jeune École was actually as concerned with the moral and social effects of military actions as on their immediate tactical outcome. Against Italy, for example, the reliance of which on foreign trade was small, the Jeune École realized it could not succeed through commerce warfare. Accordingly it envisioned, in case of war with that nation, shore bombardment, not to do indiscriminate damage but to affect the morale of the population. Writes Ropp: "The moral effects of bombardment were more important than the actual destruction, for the real economic strength of Italy, the heavy industry in the northern plain, could not be touched by such means."⁵⁸

The other major naval powers of the time took the Jeune École very seriously. At the height of the influence of the Jeune École's popularity, Austria, Russia,

and Germany all abandoned their battleship construction plans. The British Admiralty may not have responded appropriately. At least one scholar, Angus Ross, has argued that British naval planners failed to address this challenge sufficiently: "There is little doubt that British trade would have been vulnerable to a properly organized and systematic attack of the type envisaged by the French in the 1880s."⁵⁹

Many Britons despaired, convinced that the country would be cut off from food by commerce raiding; journalists and scaremongers encouraged this fear, writing of what they called the "starvation" theory. The distinguished mid-twentieth-century historian Arthur J. Marder referred to "the 'guerre de course' nightmare." The fear did not subside until a royal commission studied the problem in 1903; it accepted the Admiralty's claim that it could and must maintain command of the seas, and that as long as it could do so, it would be able to prevent commerce from being seriously interrupted.⁶⁰ By 1905, the chance of war with France had become remote, and the problem faded in Britain. But Marder, writing his famous study of the Royal Navy during the early days of World War II, would note that "for two decades the possible consequences of the *guerre de course* on the outcome of a maritime war and upon England's prosperity had been the same nightmare to the experts and those in authority as London's vulnerability to air-bombing in recent years."⁶¹

The ideas of the Jeune École strongly affected the Austro-Hungarian Navy, through the close ties that existed between its navy's staff and that of the French, and in particular through the influence of Admiral Max von Sterneck, its commander. Sterneck was a close follower of Aube, and he had his navy test many of Aube's tactics while they were still being debated in France.⁶² Sterneck wrote of his relationship with Aube: "It appears as if we have had the same ideas simultaneously, with the difference that I can put them into action immediately."⁶³

The Jeune École may have had its greatest effect, however, through its influence on a naval strategist who disagreed strongly with most of its program, Alfred Thayer Mahan. Mahan wrote his major works at least in part to counter its influence, seeking specifically to disprove the view of the Jeune École (and many others at the time) that the days of great naval battles were past. The Jeune École looked to the wars from 1854 to 1870 and saw in them lessons pointing to *guerre de course* and coastal warfare; Mahan reached back farther in history to prove the importance of command at sea and traditional naval battles.⁶⁴

Aube himself not only instituted naval maneuvers and exercises but took account of their results—such as in early 1886, when torpedo boats proved not seaworthy enough for long independent voyages. From then on, Aube no longer advocated the use of autonomous torpedo boats, focusing instead on their role in short-range operations along the coast.⁶⁵ After the failure of the *Gabriel*

Charmes in early 1887, fast gunboats disappeared from the building program.⁶⁶ As minister, Aube was even willing to compromise with the traditionalist admirals on the subject of battleships; the 1887 budget acknowledged that ironclads would still form the nucleus of the French Navy.⁶⁷

Many of the Jeune École's ideas—such as small boats operating independently—were clearly misguided, and even appear foolish today. Indeed, Ropp writes that it was “neglect of the most elementary military principles” that proved the undoing of the reformers. But he also points out that “in the ridicule which now greeted their tactical proposals, many people had already forgotten that Aube and his followers had been the first people to analyze many of the salient features of modern naval war.”⁶⁸ The positive influences of the Jeune École, often forgotten, included the early development of a modern cruiser fleet, the idea of a worldwide system of bases and coal stations, emphasis on coastal protection, and administrative reforms, including the founding of the French naval academy.⁶⁹

Perhaps the most forward-looking concept promoted by Aube was the submarine. There is some question as to how much credit he deserves for helping to advance this idea; Brodie sees Aube as an important factor in putting France ahead of other navies in developing the submarine, while Ropp argues that this advance was not the result of the Jeune École but of “patient experimentation by a long series of naval officers,” especially Dupuy de Lome, who developed the *Gymnote*, which Aube accepted for trials in 1886.⁷⁰ However, even Ropp acknowledges that it was partly because the school had been so thoroughly discredited that its ideas concerning the submarine received so little attention, and that “the competition which eventually produced the first successful French submarine had been started by Aube himself.”⁷¹ Although more research might prove useful here, it seems that the concept of submarine warfare is but one of several areas in which Aube deserves more credit for flexibility and thoughtful innovation than he often receives.⁷²

Ahead of Its Time?

To assert that many of the Jeune École's innovations were well ahead of their time is not at all the same as arguing that the Jeune École was “right”—clearly it was wrong, in terms of many of its tactical concepts, its administrative methods, and its political impact. It is one thing to be wrong because one's ideas are fundamentally ill considered; it is another to be wrong because they appear too early. In the first case, the lessons for posterity can only be negative, and this is the view represented by Professor Vego's interpretation of the Jeune École—that we must take care not to do what it did. But perhaps the Jeune École was wrong largely because it was premature. If so, the lesson is quite different—we must take care not to do things *how and when* the Jeune École did.

Students of the Jeune École often make the point that Aube and his followers were prophetic in their tactical understanding of future naval warfare. Theodore Ropp has described the Jeune École as foreseeing that in a future war:

- The weaker fleet would stay at its bases and refuse combat.
- The stronger would be forced to do the same, for fear of the torpedo.
- The only significant naval activity would be commercial warfare.
- Warfare would be absolutely merciless, disregarding the laws of war.

As Ropp writes, “It is possible to view the events of the war of 1914–18 under exactly those four points.”⁷³ The historian Lawrence Sondhaus has argued that “from the perspective of the First World War, Aube’s predictions seemed prophetic, especially his conviction that battleships ultimately would stay in port while smaller vessels ventured out to fight. Indeed, Germany’s deadly campaign of submarine warfare in the First World War seemed to vindicate the Jeune École.”⁷⁴

Sondhaus makes an even stronger argument, that “if the evolution of the submarine somehow had been advanced by a quarter-century, the Jeune École would have survived to establish a new paradigm of naval warfare, making cruisers the capital ships of the world’s navies. In such a scenario, the battleship renaissance of the years 1890–1914 would never have occurred.”⁷⁵ This may be taking the point too far; we should not need to resort to counterfactual history to see the significance of the Jeune École for today’s naval planners. The Jeune École was not ahead of its time simply because it predicted many of the important features of future war—as significant as that accomplishment might have been. It was also farsighted in that it analyzed its environment and used concepts remarkably similar to those used by many of today’s forward-looking military strategists. It saw changes taking place not only in military technology but also in communications, business, and society, and it looked for a way to combine those changes into a new way of warfare.

Yet despite its best efforts, the Jeune École could not enable the French to gain and maintain the initiative against the British navy. If the British Admiralty was slow to take up the challenge of naval reform, once it felt threatened it used the nation’s economic strength to engage France in applying new technologies to ship design. It turned the tables fairly quickly, developing the *Dreadnought* and taking the lead in the naval revolution.⁷⁶ What, from the French viewpoint, had gone wrong?

The primary point is not the Jeune École’s emphasis on technology, for it was never as obsessively focused on technical matters as its critics have argued. Nor did it fail because of the extremes to which some of its adherents took its policies, although its cause was certainly harmed by the radicalism of Aube’s

successors. Rather, Aube and his followers failed because they did not understand well enough the temper of their times—and the times were not yet ready for the *Jeune École*. Its members foresaw many significant developments in naval technology and tactics, and they produced a strategy that might have worked. But they misjudged the pace of change in warfare; the state of the art was not advancing as quickly as they seem to have felt. Many of their ideas would return years later as key elements of naval warfare (such as the submarine) or as potentially transformational concepts more than a century later (networking many small units), but in the 1880s the time was not yet at hand. The dominance of capital ships and conventional war at sea would not have run its course until the end of the Second World War, at least; other, potentially more effective technologies or strategies would have to wait.⁷⁷

THE PARALLEL WITH NETWORK-CENTRIC WARFARE

Network-centric warfare suggests that just as a network of computers is much more capable than a number of stand-alone units, a network of military platforms will be more efficient, faster, and more capable than the same number of unconnected platforms. But NCW advocates are quick to point out that the concept involves much more than just communications networks. As Vice Admiral Cebrowski describes it, “NCW is not narrowly about technology, but broadly about an emerging military response to the information age.”⁷⁸ According to him, this type of change “enables a shift from attrition-style warfare to a much faster and more effective warfighting style characterized by the new concepts of speed of command and the ability of a well-informed force to organize and coordinate complex warfare activities from the ground up.”⁷⁹

More recently, its boosters have credited NCW with helping to produce military success in Operations ENDURING FREEDOM and IRAQI FREEDOM, supporting peacekeeping and peace-enforcement operations around the globe, and “even aid[ing] in combating the outbreak of SARS [severe acute respiratory syndrome] in South East Asia.”⁸⁰ Critics like Frederick W. Kagan have charged that the underlying tenets of NCW are overdrawn and rely too much on technology, but defenders reply that these critics do not understand the nature of military transformation. Transformation, in their view, is much broader than just the use of technology, such as airpower and precision guided munitions: “Instead, transformation is an effort to provoke the military and civilian leaders of the nation to ask themselves tough questions and then to find the right, though challenging, answers.”⁸¹

At least one of those challenging answers does involve a great deal of technology. Notably, NCW has inspired a major Department of Defense (DoD) effort to create a secure global information network called the Global Information Grid,

or GIG—also referred to as the “war net.” Press reports indicate it may cost hundreds of billions of dollars and take two decades to build, and even Vint Cerf, one of the fathers of the Internet and a consultant on the war net, worries that it may not be realistic: “This is sort of like Star Wars, where the policy was, ‘Let’s go out and build this system,’ and technology lagged far behind.”⁸² The Defense Department’s supporters argue the GIG will play a central role in transforming the U.S. military into a net-centric force, but the Government Accountability Office argues that “while DoD’s vision of the GIG is compelling, the breadth and depth of the GIG and DoD’s objectives for netcentric warfare, present enormous challenges and risks—many of which have not been successfully overcome in smaller-scale efforts and many of which require significant changes in DoD’s culture.”⁸³

A full evaluation of NCW or of specific programs, such as the GIG, would be beyond the scope of this article, but we can already recognize several aspects of the *Jeune École* experience. Of course, the strategic circumstances facing France in the 1880s were quite different from those facing the United States and its navy today, but the theories of the *Jeune École* and NCW appear to be inspired by some of the same dynamics. At the broadest level, both ideas represent an effort to develop new strategic concepts that depart from the traditional emphasis on command of the sea. Command of the sea is no longer as contentious today as it was during the Cold War, whereas new threats require the application of naval power ashore; in their time the *Jeune École* enthusiasts realized that they simply could not afford to contest command of the sea with the British and sought an alternative approach. The approach they chose resembles network-centric warfare in a number of specific ways.

Emphasis on Technological Innovation. This may be the most obvious parallel. Even if, as NCW advocates argue, their concept involves much more than new technology and connectivity, modern weaponry and innovative technology are still fundamental parts of their proposed transformation. Technology was also a key factor for the *Jeune École*, with the torpedo only the most prominent of the new inventions incorporated into their strategies and tactics; under Vice Admiral Aube the French Navy experimented also with the use of oil fuel instead of coal, new types of high-explosive shells, and the submarine.

But even more significant is that in both schools of thought we see a strong faith not just in the latest technical fads but in technological progress writ large. Innovation, experimentation, and change were watchwords for the *Jeune École*, much as they are today for advocates of network-centric warfare. One supporter of the *Jeune École* wrote, “Let us be better, if that be possible, but in any case *we must be different*, in the adaptation to rejuvenated methods of war, of new engines,

judiciously conceived and rapidly executed.”⁸⁴ The enthusiasm for change is no less evident among NCW advocates: “The objective,” declares Vice Admiral Cebrowski, “is to create an ethos for experimentation, innovation, and a willingness to risk across the entire force.”⁸⁵

A Scientific Approach to War. NCW supporters often draw upon physics, biology, and computer science, and they avidly apply concepts like chaos and complexity theory to military operations. The Jeune École took a similarly sweeping and yet eclectic approach toward a scientific approach to war; while military theorists had long attempted to apply mathematical formulas to warfare, the French naval reformers looked to many other fields of science for ideas and principles they could apply. For example, they advocated the concept of many small craft attacking a larger ship not just because they believed it effective but because it was scientific in itself—the Jeune École saw the battleship as a complex organism that could be destroyed by the “microbes” of torpedo boats.⁸⁶

Speed and Precision. NCW relies on speed both in the relatively simple, tactical sense of weapons and forces operating quickly, but also at higher levels, at which speed of command and decision making become vital. The Jeune École did not address speed of command as such, but it proposed to use the technology and tactics of its time to gain speed and precision. It emphasized speed over mass, made full use of steam propulsion, and employed many small, fast, swarming platforms rather than a few big, slower ones.⁸⁷ Its stress on the torpedo can be seen as a parallel to today’s focus on cruise missiles and other precision weapons.

Networked Forces. The most fundamental concept underlying NCW may be that networked forces are intrinsically more capable than so many individual platforms. The modern concept of a network did not exist in Aube’s time, but he clearly saw the importance of using the latest communications systems to coordinate attacks by geographically dispersed units. The telegraph, in particular, was to be used to synchronize the attacks of torpedo boats, a capability Aube saw as crucial in defending a coast against an enemy landing: “With the extreme mobility that steam gives to all warships . . . with the speed and sureness of information permitted by the electric telegraph, with the ability to concentrate forces provided by the railroad, though no point on the coast is safe from attack, there is none that cannot be strongly and rapidly defended.”⁸⁸

Focus on Effects. Network-centric warfare embraces the concept of “effects-based operations”; Vice Admiral Cebrowski has described NCW as incorporating a “new mental model of warfare that emphasizes outcomes, or effects.”⁸⁹ The Jeune École’s similar emphasis on the ultimate effects of military actions rather than on immediate destruction achieved is implied clearly in its contingency

plans to strike Italy “from the sea,” using shore bombardment against forts and cities to destroy the morale of the populace.

Shock and Awe. Here we see another modern term that has been adopted by NCW theorists but has a clear parallel in the thinking of the Jeune École. A network-centric force will, advocates argue, “for the first time . . . provide us with the possibility of moving beyond a strategy based on attrition, to one based upon shock and awe.”⁹⁰ Terminology aside, this is what the Jeune École was thinking of when it argued that sudden massed attacks would create panic among the populations of enemy states. This effect was to be the purpose of shore bombardment against Italy, and also of a commercial war against England, which was intended “to produce an economic panic that would bring about social collapse.”⁹¹

Modern Business and Economic Concepts. NCW draws heavily from the business world: “The organizing principle of network-centric warfare has its antecedent in the dynamics of growth and competition that have emerged in the modern economy.”⁹² Economic ideas were just as important for the Jeune École. Gabriel Charmes explicitly argued that the concept of division of labor could be extended from political economy to warfare.⁹³ Aube was concerned about the social problems of capitalism, arguing that France had to expand its colonial empire to open new markets, encourage production, and eliminate poverty.⁹⁴

What have we proved? To point out these comparisons between network-centric warfare and the Jeune École tells us little about whether the concepts they share are valid or not. Both schools are criticized—often rightly—but the association between them is strengthened by the fact that they are often criticized for the same things. For example, although neither school focuses as exclusively on technology as their detractors believe, both seem to trust too much in overly complex and esoteric mathematical calculations and scientific theorizing.⁹⁵

On the other hand, we should be careful not to draw too much from this parallel. Not only was France’s strategic situation in the late 1800s very different from America’s today but, and more significantly, several areas of critical importance to the Jeune École have no direct analogue today—such as emphasis on commercial warfare, and colonial naval presence.⁹⁶ Nonetheless the similarities are striking enough that the experience of the Jeune École surely offers lessons for military and naval strategists today. The question is, then, what are they?

THE TEMPER OF THE AGE

Might network-centric warfare suffer the same fate as the Jeune École? Naval theorists today need not worry about some of the defects of the earlier school. For instance, Aube’s “three greatest faults were his technical incompetence, his

optimism, and his taste for resorting to the public press.”⁹⁷ While one can certainly disagree with the tactical and technological prescriptions of NCW enthusiasts, these advocates are hardly unqualified. They might be overoptimistic, but that is unlikely to be a fatal flaw unless—and this is a real risk—it turns to arrogance. Also, although the debate over NCW has occasionally become heated within the Navy and in the press, it shows little inclination to spill over into politics.

But our review has shown that the principal lessons of the *Jeune École* arise from *how* and *when* it attempted its naval revolution. Network-centric warfare proponents have much to learn from the *Jeune École*’s methods; they lack a key virtue of, and share a major failing with, Aube and his supporters of more than a century ago. The most important point of all may be the timing of military transformation; it is not at all clear that NCW has measured the temper of its age any better than the *Jeune École* did that of the late nineteenth century.

The key virtue that NCW lacks is flexibility, the willingness to admit a mistake. Admiral Aube—although not always his followers—demonstrated that virtue on several occasions. “Clearly,” observes one historian, “the very [torpedo boat] experiments designed to justify its theories had gone far to discredit the *Jeune École*.”⁹⁸ But as we have seen above, Aube admitted the mistake and abandoned his plans for small, long-range, independently operating combatants.

It is not clear that advocates of NCW and force transformation today are so flexible. Their inability to admit error can be seen in relatively small things, such as in the bland official responses to such complaints as that by retired Marine lieutenant general Paul Van Riper that the results of a large war game, MILLENNIUM CHALLENGE ’02, were rigged to support the Pentagon’s goals for force transformation. Senior officers at U.S. Joint Forces Command, which sponsored the war game, insist it was fair and that it validated future war-fighting concepts such as effects-based operations.⁹⁹ Frederick Kagan charges, however, that NCW boosters are inflexible concerning such fundamental issues as the transformation of warfare itself: “The U.S. is now attempting to transform its military in ways that hinder the conduct of current operations, even as those operations literally rip it apart.”¹⁰⁰

If so, the key failing that network-centric warfare shares with the *Jeune École* is the opposite of Aube’s personal flexibility—that supporters of both schools have frequently claimed too much for their ideas and dismissed criticism with an assurance bordering on arrogance. In the case of the *Jeune École*, its advocates tried to do too much and were unwilling to accept criticism or allow dialogue: “Whoever attacked them, attacked progress, logic, and science.”¹⁰¹ This single-mindedness can be seen in Charmes’s statement that “a war of pursuit will, therefore, necessarily, fatally, definitely, replace squadron warfare in future

conflicts between maritime nations.”¹⁰² It seems only a short step from Charmes’s confident pronouncement to declarations that network-centric warfare “will prove to be the most important RMA in the past 200 years.”¹⁰³ Today’s reformers may feel that sure of themselves, but history shows they can hurt their cause by trumpeting the fact too loudly.

The main caution that the story of the *Jeune École* offers for advocates of NCW and American defense transformation, then, is not that they may be wrong in their assessments of the trends influencing military force in the twenty-first century but that they may be right, too early. They may be ahead of their time *technologically*; critics have often charged that network-centric warfare relies on untested technical and engineering concepts.¹⁰⁴ But the comparison with the *Jeune École* shows that it may be even more dangerous to be ahead of one’s time *strategically*. In France in the 1880s not even the combination of a brilliant innovator and the latest technical advances was able to challenge successfully the traditional school of naval warfare. Critics today charge that NCW has also misjudged the changing nature of war. Loren B. Thompson, for example, believes that it is “time to set aside the network-centric ideology and recognize the many ways in which war has not changed.”¹⁰⁵

Advocates of network-centric warfare explicitly tie their revolution to the information age; the Department of Defense report to Congress on NCW, for example, states, “Warfare takes on the characteristic of its age. NCW continues this trend—it is the military response to both the challenges and the opportunities created by the Information Age.”¹⁰⁶ But just as the *Jeune École* misjudged the speed at which naval warfare was changing in the late 1800s, today’s transformation advocates may find they have invested too much in expensive and complex systems like the Global Information Grid, to the detriment of traditional military systems and capabilities. The *Jeune École* found that its confidence in the revolutionary nature of submarines and torpedoes was premature, and in the same way today’s military transformation supporters may find that information networks and precision guided munitions will not change warfare as quickly as they would hope. The history of the *Jeune École* reminds us that no new idea or innovative technology, no matter how prophetic, can change the nature of warfare on its own. It also suggests that if network-centric warfare fails, it is not likely to do so because it mimicked the *Jeune École* too closely but because it too could not judge the temper of its times.

NOTES

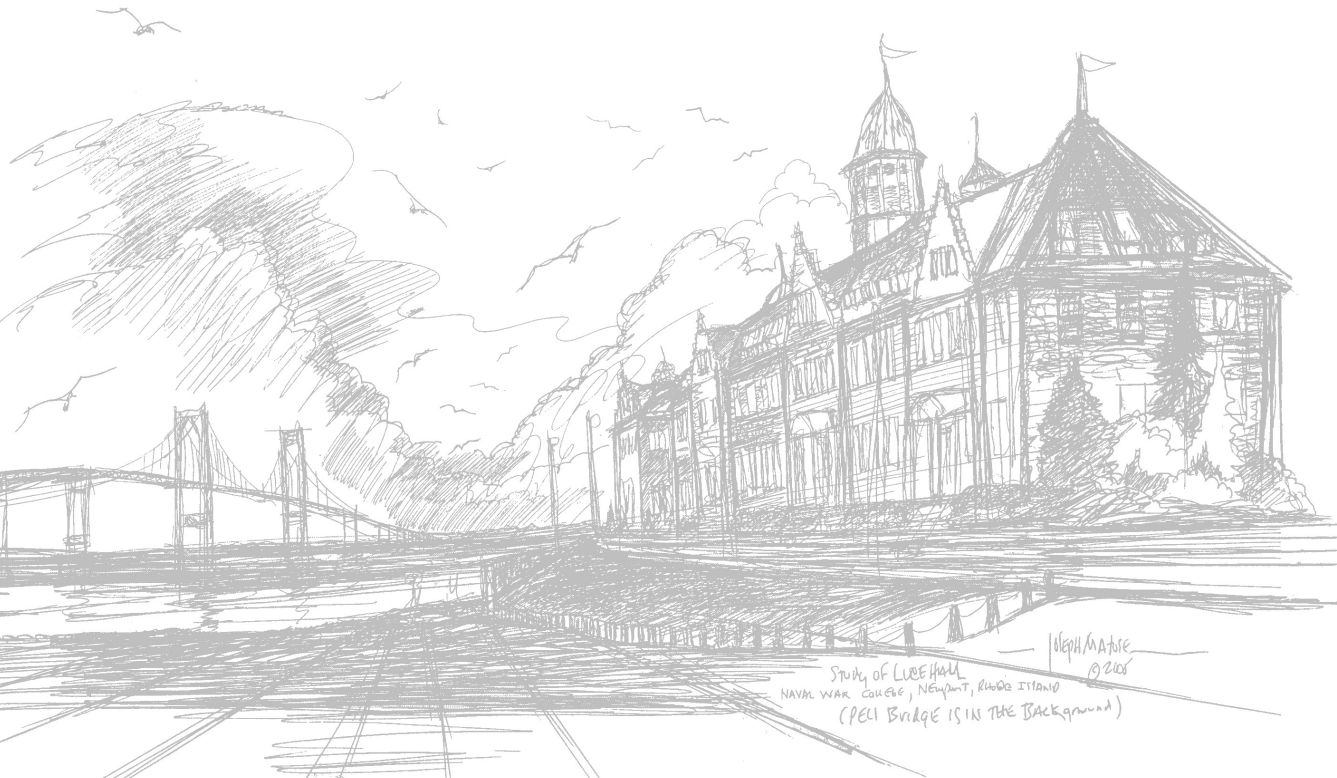
1. This is not to argue that the Jeune École was the only naval revolution to adopt network-centric principles. Admiral Sir John Fisher's transformation of the Royal Navy before World War I emphasized many of the same things as today's transformation advocates, including aggressive exploitation of new technologies and innovation, an emphasis on speed, and the development of a global information network based on the wireless telegraph. But the Fisher Revolution has been well documented, and while the lessons of the Jeune École are less well known, they may in fact apply more directly to today. On Fisher, see for example Nicholas A. Lambert, *Sir John Fisher's Naval Revolution* (Columbia: Univ. of South Carolina Press, 1999), and by the same author, "Transformation and Technology in the Fisher Era: The Impact of the Communications Revolution," *Journal of Strategic Studies* 27, no. 2 (June 2004), pp. 272–97.
2. E. H. Jenkins, *A History of the French Navy* (London: Macdonald and Jane's, 1973), p. 307.
3. J. R. Hill, "Accelerator and Brake: The Impact of Technology on Naval Operations, 1855–1905," *Journal for Maritime Research* (December 1999), available at www.jmr.nmm.ac.uk.
4. Milan Vego, "Net-Centric Is Not Decisive," U.S. Naval Institute *Proceedings* (January 2003), p. 53.
5. James J. Tritten and Luigi Donolo, *A Doctrine Reader: The Navies of United States, Great Britain, France, Italy, and Spain*, Newport Paper 9 (Newport, R.I.: Naval War College Press, 1995), p. 56.
6. Michael Vlahos, "Military Reform in Historical Perspective," *Orbis* 27, no. 2 (Summer 1983), p. 252. Martin van Creveld also appears to believe the Jeune École's failure was largely due to an overreliance on technology; Martin van Creveld, *Technology and War: From 2000 B.C. to the Present* (New York: Free Press, 1989), p. 204.
7. Stephen Biddle, "The Past as Prologue: Assessing Theories of Future Warfare," *Security Studies* 8, no. 1 (Autumn 1998), p. 9.
8. *Ibid.*, p. 67. The "pentomic division" organization, an attempt to deal with the prospect of tactical nuclear warfare, comprised five "battle groups," large battalions. See "Evolution of Large Divisional Structures," *Federation of American Scientists*, www.fas.org/man/dod-101/army/unit/docs/divhist.htm.
9. The key work on the Jeune École in English remains Theodore Ropp's *The Development of a Modern Navy: French Naval Policy 1871–1904*, ed. Stephen S. Roberts (Annapolis, Md.: Naval Institute Press, 1987), originally written as his Harvard PhD dissertation in 1937. Several other works, however, also deserve special mention. The only book-length study of the Jeune École to be published is in German: Volkmar Bueb's *Die "Junge Schule" Der Französischen Marine: Strategie Und Politik 1875–1900* (Boppard am Rhein, Ger.: Harald Boldt Verlag, 1971). It provides valuable insight, especially into the battle between the Jeune École and what Bueb describes as the "Alte Schule" of traditionalists. To my knowledge only one work of the Jeune École has been translated into English: Gabriel Charmer's *Naval Reform: From the French of the Late M. Gabriel Charmer*, trans. J. E. Gordon-Cumming (London: W. H. Allen, 1887), which aids in understanding the views of the Jeune École's primary advocate in the press. I also found very useful the exceptional 1965 Harvard senior honors thesis by Stephen Roberts (later the editor of Ropp's dissertation), "Warships and Politicians: The Effect of Politics on French Naval Preparedness, 1886–1900." In it Roberts makes impressive use of French archival sources—some of which had not been available to Ropp when he did his earlier work. Other particularly useful secondary works are Geoffrey Till, "The Jeune École," in his *Maritime Strategy and the Nuclear Age* (New York: St. Martin's, 1982), pp. 34–38; and Paul Halpern, "The French Navy, 1880–1914," in *Technology and Naval Combat: In the Twentieth Century and Beyond*, ed. Phillips Payson O'Brien (London: Frank Cass, 2001), pp. 36–52, both relying on French sources as well as on Ropp.
10. Bernard Brodie, *Sea Power in the Machine Age* (Princeton, N.J.: Princeton Univ. Press, 1941), p. 252; Theodore Ropp, *War in the Modern World* (Durham, N.C.: Duke Univ. Press, 1959), p. 190.
11. Ropp, *The Development of a Modern Navy*, p. 27.

12. Lawrence Sondhaus, *Navies of Europe 1815–2002* (London: Longman, 2002), pp. 68–69.
13. Theodore Ropp, “Continental Doctrines of Sea Power,” in *Makers of Modern Strategy*, ed. Edward Mead Earle (Princeton, N.J.: Princeton Univ. Press, 1944), p. 446.
14. Ropp, *The Development of a Modern Navy*, pp. 22–25.
15. *Ibid.*, 38.
16. See, for example: William H. McNeill, *The Pursuit of Power: Technology, Armed Force, and Society since A.D. 1000* (Chicago: Univ. of Chicago Press, 1982), pp. 263–65.
17. Ropp, *The Development of a Modern Navy*, p. 112.
18. *Ibid.*, p. 19; Till, *Maritime Strategy and the Nuclear Age*, pp. 35–36.
19. Aube, writing in 1882, as quoted in James Cable, *The Political Influence of Naval Force in History* (New York: St. Martin’s, 1998), p. 77. See also Roberts, “Warships and Politicians,” p. 15.
20. Lawrence Sondhaus, *Naval Warfare, 1815–1914* (London: Routledge, 2001), p. 142.
21. Aube in 1885, cited in Ropp, *The Development of a Modern Navy*, p. 165, also in Roberts, “Warships and Politicians,” p. 17.
22. Bueb, *Die “Junge Schule,”* pp. 5–6.
23. *Ibid.*, p. 24.
24. Ropp, *The Development of a Modern Navy*, p. 120. See also Roberts, “Warships and Politicians,” p. 18.
25. Ropp, *The Development of a Modern Navy*, p. 159.
26. *Ibid.*, p. 160.
27. Roberts, “Warships and Politicians,” p. 19.
28. Bueb, *Die “Junge Schule,”* p. 159.
29. Roberts, “Warships and Politicians,” p. 21.
30. Till, *Maritime Strategy and the Nuclear Age*, p. 36.
31. Ropp, *The Development of a Modern Navy*, p. 176.
32. *Ibid.*
33. Roberts, “Warships and Politicians,” pp. 21–23; Ropp, *The Development of a Modern Navy*, pp. 176–77.
34. Ropp, *The Development of a Modern Navy*, p. 171.
35. Roberts, “Warships and Politicians,” p. 27; Ropp, *The Development of a Modern Navy*, p. 174.
36. Brodie, *Sea Power in the Machine Age*, p. 284; Ropp, *The Development of a Modern Navy*, p. 175.
37. Ropp, *The Development of a Modern Navy*, p. 178.
38. Halpern, “The French Navy, 1880–1914,” p. 41; Ropp, *The Development of a Modern Navy*, pp. 306–307.
39. M. Saissy, cited in Brodie, *Sea Power in the Machine Age*, p. 284.
40. Ropp, *The Development of a Modern Navy*, p. 326.
41. Halpern, “The French Navy, 1880–1914,” p. 45; Ropp, *The Development of a Modern Navy*, pp. 328–34.
42. Ropp, *The Development of a Modern Navy*, p. 325.
43. Sondhaus, *Naval Warfare, 1815–1914*, pp. 156–57.
44. See generally Ropp, “Continental Doctrines of Sea Power.”
45. Till, *Maritime Strategy and the Nuclear Age*, p. 38.
46. Andrew F. Krepinevich, “Cavalry to Computer: The Pattern of Military Revolutions,” *National Interest*, no. 37 (Fall 1994), p. 35.
47. Ropp, *The Development of a Modern Navy*, p. 8; Sondhaus, *Navies of Europe 1815–2002*, pp. 11–20.
48. Halpern, “The French Navy, 1880–1914,” p. 39.
49. Ropp, *The Development of a Modern Navy*, p. 167.
50. Roberts, “Warships and Politicians,” pp. 14–15.
51. *Ibid.*, p. 36.
52. *Ibid.*, p. 52.
53. Bueb, *Die “Junge Schule,”* p. 166.
54. Ropp, *The Development of a Modern Navy*, p. 10.

55. Tritten and Donolo, *A Doctrine Reader*, p. 69 [emphasis in the original].
56. Halpern, "The French Navy, 1880–1914," p. 37.
57. Bueb has made a similar argument, writing that it would be a simplification to blame the poor condition of the French Navy on either the Jeune École or the traditionalists who opposed them (*Die "Junge Schule,"* p. 165).
58. Ropp, *The Development of a Modern Navy*, p. 162.
59. Angus Ross, *Responding to the "Jeune École": The Royal Navy's Lack of Foresight in Addressing the Nature of the Mercantile Warfare Problem in the 1880s and 1890s*, paper prepared for presentation at the Victorians Institute Conference, The Citadel, October 2002, p. 10. See also Angus Ross, "Losing the Initiative in Mercantile Warfare: Great Britain's Surprising Failure to Anticipate Maritime Challenges to Her Global Trading Network in the First World War," *International Journal of Naval History* 1, no. 1 (April 2002).
60. Arthur J. Marder, *The Anatomy of British Sea Power* (New York: Knopf, 1940), pp. 93–94.
61. *Ibid.*, p. 104.
62. Sondhaus, *Navies of Europe 1815–2002*, pp. 95–96.
63. Lawrence Sondhaus, "Strategy, Tactics, and the Politics of Penury: The Austro-Hungarian Navy and the Jeune École," *Journal of Military History* 56, no. 4 (October 1992), p. 593.
64. Ropp, "Continental Doctrines of Sea Power," p. 452.
65. Roberts, "Warships and Politicians," pp. 21–23.
66. *Ibid.*, p. 27.
67. *Ibid.*, pp. 24–25.
68. Ropp, "Continental Doctrines of Sea Power," p. 452.
69. This list is from Bueb, *Die "Junge Schule,"* pp. 166–67.
70. Brodie, *Sea Power in the Machine Age*, p. 284; Ropp, *The Development of a Modern Navy*, p. 349.
71. Ropp, "Continental Doctrines of Sea Power," p. 453.
72. Of note, Alex Roland also gives the Jeune École credit for promoting submarine warfare. Alex Roland, *The Technological Fix: Weapons and the Cost of War*, paper presented at U.S. Army War College Sixth Annual Strategy Conference, 1995, p. 14.
73. Ropp, *The Development of a Modern Navy*, pp. 166–67.
74. Sondhaus, "Strategy, Tactics, and the Politics of Penury," p. 602.
75. Sondhaus, *Naval Warfare, 1815–1914*, p. 155.
76. Krepinevich, "Cavalry to Computer," p. 37.
77. On the continued relevance of the large-ship battle fleet following the introduction of the torpedo boat, see, for example, Karl Lautenschlager, "Technology and the Evolution of Naval Warfare," *International Security* 8, no. 2 (Fall 1983), pp. 18–20.
78. Arthur K. Cebrowski, "Network-centric Warfare: An Emerging Response to the Information Age," presentation at the 1999 Command and Control Research and Technology Symposium, 29 June 1999. For background on NCW, see Arthur K. Cebrowski and John J. Garstka, "Network-centric Warfare: Its Origin and Future," U.S. Naval Institute *Proceedings* (January 1998), pp. 28–35; U.S. Defense Dept., *Network Centric Warfare: Department of Defense Report to Congress* (Washington, D.C.: 2001); and Clay Wilson, *Network Centric Warfare: Background and Oversight Issues for Congress* (Washington, D.C.: Congressional Research Service, June 2004). Useful critiques of the concept include Richard J. Harknett, "The Risks of a Networked Military," *Orbis* 45, no. 4 (Winter 2000), pp. 127–43, and Bill Toti, "Stop the Revolution: I Want to Get Off," U.S. Naval Institute *Proceedings* (July 2000), pp. 30–33.
79. Arthur K. Cebrowski, "Sea, Space, and Cyberspace: Borderless Domains," address given at International Military Operations and Law Conference, Honolulu, Hawaii, 26 February 1999.
80. John Garstka, "Implementation of Network Centric Warfare," *Transformation Trends* (U.S. Defense Dept. Office of Force Transformation), 28 January 2004.
81. Tom Hone, "Understanding Transformation," *Transformation Trends*, 16 January 2004. For the view of NCW's critics, see, for example, Frederick W. Kagan, "A Dangerous Transformation," *Wall Street Journal Opinion Journal*, 12 November 2003, available at

- www.opinionjournal.com, and by the same author, "War and Aftermath," *Policy Review Online*, August/September 2003; Edmund C. Blash, "Network-centric Warfare Requires a Closer Look," *Signal* (May 2003), available at www.iwar.org.uk/rma/resources/ncw/ncw-forum.html. A more balanced but still critical view is Peter J. Dombrowski and Andrew L. Ross, "Transforming the Navy: Punching a Feather Bed?" *Naval War College Review* 56, no. 3 (Summer 2003), p. 107–31.
82. Tim Weiner, "Pentagon Envisioning a Costly Internet for War," *New York Times*, 13 November 2004, p. A1.
83. U.S. Government Accountability Office, *The Global Information Grid and Challenges Facing Its Implementation*, GAO-04-858 (Washington, D.C.: July 2004), p. 29.
84. Ropp, *The Development of a Modern Navy*, pp. 165–66 [emphasis original]. See also Ropp, "Continental Doctrines of Sea Power," p. 450.
85. Cebrowski and Garstka, "Network-centric Warfare," p. 35.
86. Ray Walser, *France's Search for a Battle Fleet: Naval Policy and Naval Power, 1898–1914* (New York: Garland, 1992), p. 17.
87. This stress on numerous small ships resembles NCW thinking beyond simply its use of speed. Angus Ross has suggested that another NCW concept may have an analogy in the French Navy under Admiral Fournier, whom Ropp called "the best thinker of the Jeune École," and who at the turn of the century advocated a large, blue-water fleet supported by a fleet of smaller ships the U.S. Navy planning community might call "streetfighters." Personal correspondence, 2001.
88. Aube, 1882, cited in Ropp, *The Development of a Modern Navy*, p. 157.
89. Arthur K. Cebrowski, "Network-centric Warfare: An Emerging Military Response to the Information Age," presentation at the 1999 Command and Control Research and Technology Symposium, 29 June 1999.
90. David S. Alberts, John J. Garstka, and Frederick P. Stein, *Network Centric Warfare: Developing and Leveraging Information Superiority*, 2d ed. (Washington, D.C.: Office of the Assistant Secretary of Defense for Networks and Information Integration, 1999), p. 184.
91. Ropp, *The Development of a Modern Navy*, p. 162.
92. Cebrowski and Garstka, "Network-centric Warfare," p. 29.
93. Charmes, *Naval Reform*, p. 74. See also Ropp, *The Development of a Modern Navy*, pp. 160–61, and Walser, *France's Search for a Battle Fleet*, p. 11.
94. Ropp, *The Development of a Modern Navy*, p. 163.
95. Bueb, *Die "Junge Schule"*, p. 31; Vego, "Net-Centric Is Not Decisive," p. 53.
96. Unless one tries to compare the Jeune École's colonial policy with NCW's emphasis on "forward sea-basing," but I think that is too much of a stretch. I also do not mean to make too much of the comparison between the positions held by Vice Admirals Aube (Minister of the Navy) and Cebrowski (Director of Force Transformation). A direct comparison of the influence wielded by these two positions is beyond the scope of this article; the point here is simply that both schools of thought were popular enough to generate broader interest beyond their originators and their immediate supporters, and that their originators were put into more senior positions where they had a chance to initiate the changes they had advocated.
97. Ropp, *The Development of a Modern Navy*, p. 167.
98. Alan Cowpe, "The Royal Navy and the Whitehead Torpedo," in *Technical Change and British Naval Policy 1860–1939*, ed. Bryan Ranft (London: Hodder and Stoughton, 1977), p. 30.
99. Sean D. Naylor, "War Games Rigged? General Says Millennium Challenge 02 'Was Almost Entirely Scripted,'" *Army Times*, 16 August 2002. See also the PBS *Nova* interview with Van Riper, "The Immutable Nature of War," at www.pbs.org/wgbh/nova/wartech/nature.html. PBS also interviewed Cebrowski for the same program; he took a more flexible approach toward the controversy than Joint Forces Command did, arguing that the debate over how MILLENNIUM CHALLENGE '02 was run was "really a very American sausage-making process."
100. Kagan, "A Dangerous Transformation."

101. Bueb, *Die "Junge Schule,"* p. 168.
102. Charmes, *Naval Reform,* p. 58.
103. Cebrowski and Garstka, "Network-centric Warfare," p. 29. For a less critical commentary on overconfidence on the part of NCW supporters, see Thomas P. M. Barnett, "The Seven Deadly Sins of Network-centric Warfare," U.S. Naval Institute *Proceedings* (January 1999), pp. 36–39.
104. For example, Blash, "Network-centric Warfare Requires a Closer Look," and Stephen D. Wolthusen, "Self-Inflicted Vulnerabilities," *Naval War College Review* 57, no. 3/4 (Summer/Autumn 2004), pp. 103–13.
105. Loren B. Thompson, "Military Transformation Falters in Mesopotamia," Lexington Institute Issue Brief (Arlington, Va.: 16 April 2004), available at www.lexingtoninstitute.org/defense/040416.asp.
106. *Department of Defense Report to Congress,* p. iii.



A gift to each military and staff member of the Naval War College from the artist,
Mr. Joseph S. Matose, upon his retirement from the Facilities Maintenance Department
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IN MY VIEW

COMMANDERS ON THE SPOT

Sir:

While I agree with Thomas Wildenberg's description of doctrine in his article "Midway: Sheer Luck or Better Doctrine?" [Winter 2005, pp. 121–35] as "comprising the fundamental principles by which military forces guide their actions," I think it should be pointed out that doctrine does not micromanage military operations, nor does it completely dispel the "fog of war" which limits information about an enemy, nor does doctrine eliminate the significant role of chance in war. There is also considerable leeway in how individuals may interpret doctrine, in how much significance they may give to any aspect of doctrine, and in how they may apply doctrine. And many military decisions do not come within the purview of doctrine.

When considering the role of doctrine in influencing Japanese and American conduct in the Battle of Midway, it must not be forgotten how close the Japanese Navy came to inflicting severe damage on the U.S. Navy's carrier force.

No doubt, as Wildenberg says, Japanese naval doctrine did not emphasize reconnaissance. And Admiral Nagumo's operations officer, Commander Minoru Genda, was personally disinclined to allot resources to reconnaissance, believing that resources were better spent on attacking the enemy. Genda's personal disinclination did reflect doctrine, but a commander in Genda's position with greater appreciation of the use of reconnaissance would have been free to allot more resources to locating the Americans' aircraft carriers.

Japanese doctrinal disparagement of reconnaissance did not prevent Captain Kameto Kuroshima, Admiral Yamamoto's senior operations officer aboard the battleship *Yamato*, from arranging for two cordons of submarines to be placed between Hawaii and Midway to report on U.S. fleet movements.

On the day of battle, one Japanese recon aircraft was half an hour late in launching because of a catapult problem. Later, a sighting of the American force was inaccurately conveyed as having no aircraft carriers, an error which was not

corrected for some time, thereby delaying the decision to attack the American ship rather than hit Midway again. Therefore, even given the Japanese doctrinal downplaying of reconnaissance, the U.S. aircraft carriers could have been located in a timely manner except for a mechanical difficulty and a reporting error, which both could have happened regardless of doctrine. Without the two non-doctrine-caused delays, Admiral Nagumo could have launched the grand assault on the U.S. carriers he intended to.

Admiral Nagumo's great error was not launching an immediate partial attack against the U.S. carriers with available aircraft followed by a later attack with remaining aircraft. The Second Carrier Division leader, Rear Admiral Tamon Yamaguchi, wanted to attack the U.S. carriers immediately with all available aircraft, whether they carried bombs better suited to hit Midway Island or not, and whether or not they had fighter support.

Striking the first blow was key to Japanese doctrine. But what sort of first blow does one conduct? Japanese doctrine didn't provide an answer. The decision was up to the commanders on the spot. In contrast to Yamaguchi's advocacy of an immediate first blow, Nagumo's chief of staff, Rear Admiral Ryunosuke Kusaka, recommended a delayed, well-coordinated, all-out grand assault. He wanted all airborne aircraft recovered, refueled, and armed with torpedoes and armor-piercing bombs, and the planes already armed to attack Midway rearmed also with torpedoes and armor-piercing bombs.

Japanese doctrine did not provide a solution to the question of what should be done in that specific situation. Admiral Nagumo asked Commander Genda for his advice, and Genda sided with Kusaka. Nagumo agreed. The opportunity to disrupt the U.S. attack was lost. And the U.S. dive-bombers found the Japanese carriers with bombs, torpedoes, and gasoline covering their hangar decks. In six minutes, three Japanese carriers were lost.

Wildenberg faults U.S. Navy doctrine for failing to have devised a workable doctrine for coordinating air attacks by different types of carrier-based aircraft. However, this failure was fortuitous at Midway. First the American torpedo planes attacked. The Japanese fighter cover was dispersed at sea level, chasing the remaining torpedo planes when the U.S. dive-bombers attacked. Denuded of fighter cover, the Japanese carriers were easy targets. If the torpedo planes and dive-bombers had attacked together, both would have been the targets of the Japanese fighters. In practice the torpedo planes acted as an unintended feint to draw off the Japanese fighters. This happened by chance, but in no human endeavor does chance play such a significant role as it does in war.

Another aspect of the battle, one which could have been disastrous for the United States, was the possibility of pursuing and engaging the retiring Japanese

forces, which Spruance refused to do and which no doubt Halsey would have done if he had been in command.

Spruance, in his second most important decision of the engagement, decided to pull away. If he had continued, the U.S. forces would have blundered into a night battle with the follow-up Japanese cruisers and battleships, and our remaining two aircraft carriers would probably have been sunk. There was no doctrinal guidance or imperative to turn to for deciding to continue or not to continue after the retiring Japanese.

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THE GLOBAL WAR ON TERROR: QUO VADIS?

Sir:

Philip G. Cerny's "Terrorism and the New Security Dilemma" (Winter 2005, pp. 11–33) makes a fundamental contribution to the study of the new (post-9/11) conflicts of the world. The key to Cerny's notion of "war on terror" is the progressing diffusion of nation-states into "crystallization of a globalizing world order," namely, "a durable disorder"—that is, "the basic security gap that results from the multilayered, crosscutting, and asymmetric global and transnational structures." He posits: "A war on terror cannot be a simple war of armed forces but must be a sociopolitical process." That explains the ongoing dilemma among concerned policy makers, military leaders, and members of the public who try to understand, let alone do something about, terrorism.

In one of the few serious public policy debates on the defense posture of the nation, the Naval War College's 2005 Current Strategy Forum addressed the theme of "Shaping the Global Maritime Security Environment." The discussions credibly included presentations by the Chief of Naval Operations and the Secretary of the Navy (the latter stood in for by Admiral John B. Nathman, Commander, U.S. Fleet Forces Command and Deputy CNO). It became clear immediately that the Navy—or the military as a whole, under the "jointness" construct since the Goldwater-Nichols Act (1986)—has "transformed" its doctrinal thinking

and concept of operations to respond to what it sees as the new global conflict situations. In the meantime, the George W. Bush administration has indiscreetly aggregated the “situations” into a simple and single term: the “global war on terror.” The military has shortened the term to an operative acronym, “GWOT,” but as an element of the military strategy for the new era. The “three-and-one construct” of shaping the Navy for the future strategic environment provides for readiness for the services’ intrinsic defense mission of major conflict operations (MCO) while engaging in the GWOT, stability (aka peacekeeping) operations, and homeland security. Sea basing—in legal international waters—for forward presence and strategic deterrence, and consequential speed and flexibility in responding to various and varying threats, is the key to this strategy of the now de facto single-superpower U.S. military.

The earnest discourses and ensuing questions, however, seemed inevitably to lead to the realization of the difficulty in shaping the future military posture to the administration’s undefined and reactive foreign policy, as exemplified in the Iraqi war muddle. Answers often echoed, “It is a ‘complex’ and admittedly ‘confusing’ environment,” or even outright admission of the issues being “above my pay grade.” Granted, the future is always a contingency and indeed unpredictable, especially in times of troubled waters. But, true to the Clausewitzian dictum of “war as [only] an instrument of policy,” the defense posture should be “shaped” to serve, enhance, and uphold the defense, foreign, geopolitical, or even (in the modern notion of “globalization”) global economic policies and design of the nation. I submit, then, that the policy of the nation must be projected intrinsically and must be comprehensively rigorous enough if it is to define, guide, and apply military power to advantage in the nation’s course.

The current sole “official” U.S. foreign policy of “global war on terror”—in its resolute simplicity—belies the complex and dynamic reality of the new world conflicts. OEF (Operation ENDURING FREEDOM), the only direct and perhaps rational response to the 9/11 terror attack, is still in search of Osama bin Laden, the claiming perpetrator—but with an increasing doubt that “killing” Osama will end the “global terrorism.” The capture of Saddam Hussein in Iraq has not changed the strait in Iraq, for instance. OIF (Operation IRAQI FREEDOM) started with the U.S. invasion, ostensibly to check Saddam’s “proliferation of WMD”; later precipitated to enforcing a “regime change” among the multiethnic, historically internecine-warfare-poised, and understandably anti-American (read foreign)-occupation populace; and now is in an intractable struggle to “kill” the “insurgents.” As this writer noted in the Winter 2004 issue of this journal (pp. 125–26), the miry demise of the Bush administration’s unilateral Iraq invasion policy had been concernedly and accurately foreboded in Dr. Phebe Marr’s “Iraq ‘the Day After’” (Winter 2003, pp. 12–29). Items of advice ignored in the

unilateral war action included some significant ones of the military leaders, e.g., on the troop strength needed—another case of policy and warfare strategy disconnect.

With the MCO-level ground-force deployment and daily mounting war casualties, “Iraq” preoccupies the current U.S. foreign policy. Simultaneously, however, the United States, in its Cold War–defaulted superpower leadership role in the world’s balance of power (though Cerny argues this role is no longer a “reliable base” for “national or collective security”), faces bubbling potential rogue-nation threats to peace. Suspected Iranian nuclear weapon development looms alongside the problematic rise of Islamic hard-liners in the state’s “free” election. The North Korean despot toting the “rogue state special” nuclear threat in his inarticulate and precarious demand for “respect,” nonetheless would call for Washington’s skillful “psychological” diplomacy (or “sociopolitical process,” à la Cerny). The proverbial “big stick” and “soft power” (Joseph Nye, Jr., Harvard) should be delicately orchestrated together with the concerned nations in the region. In the meantime, global competition and confrontation for economic hegemony, as well as for assertion as “the” nation to be reckoned with, rage on, with China in the forefront and the fledgling European Union conglomerate, India, and even Russia in line, vis-à-vis the established U.S. and Japanese economies. Worldwide anti-American sentiment, heightened by the administration’s undiscerning America-centric hubris, undermines the U.S. opportunity for constructive alliance building needed in the progressing new global conflict environment. Cerny states: “The U.S. attempt to use its power to regulate and control that [traditional nation-state] system unilaterally is becoming increasingly dysfunctional.”

Where is America going in this “*global war on terror*”? In the “durable disorder” world, the Bush policy makers might indeed be adrift in their own words. In the first place, the “global” aspect had better not be their view of the altogether complex world, in a casual “all terrorisms are the same” shrug, or worse, a political rhetoric rationalizing the war in Iraq as the all-in-one answer to the so-perceived universal, worldwide terrorism network. The Iraq war in the current “garrison” stage is a war against the precipitously engendered “insurgents” whose “global” ties extend only across the borders of Iraq proper to infiltrating Islamic-jihad neighbors. “Global,” on the other hand, should connote and promote America’s identifying with other nation-states over the globe facing their respective terrorist insurgents—in Europe, Russia, Asia, and Americas.

Secondly, “war” might suggest the most cathartic and seemingly effective means of combating terrorism. But in the new world of plurality, as Cerny asserts, “security itself” must be transformed to “pursuing a civilianization of politics and society, stressing social development, welfare, and good governance.”

Here, if for a questionable motive of regime change, the current U.S. attempt to establish a new Iraqi government, train security forces, and repair infrastructures may be on the right track. On the other hand, can the United States hand over an *American* war against Iraqis—albeit “insurgents”—to the Iraqis for an *Iraqi* war against Iraqis? Even the “foreign” insurgents are Iraqis’ Islamic (albeit jihadist) “brothers.” To note, the Iraqis so far have not come out to embrace the American “liberators” with open arms, either.

Terrorism is an act of unilateral violence on unsuspecting innocents—solely to intimidate the targeted nation’s psyche. Unlike the clashes of opposing nations’ broad geopolitical stands in major conflicts, terrorism operates but for a specific and dire insurgent *cause*—that is, “the incredible frustrations engendered by the revolution of rising expectations in a globalizing world” (Cerny). The cause could obviously be intense—although the “self-sacrificing notion” may not be so foreign. Did not a “Western” patriot ask for “liberty or death”? Cerny suggests: “What is needed is not so much a war on terror as political, economic, and social war on the causes of terror.”

That may be a tall order for this White House, with its demonstrated aversion to making intellectually rigorous and necessarily empathic foreign policies. At any rate, it will be some time before the stigma of the Iraq war—judged insolent (by the world), costly (by the American taxpayers), fraught with personal sacrifice (by American families), and ill conceived and prepared (by experts)—can be erased to restore U.S. credibility and prestige. The American military deserves better.

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BOOK REVIEWS

HOW COMFORTABLE WILL OUR DESCENDENTS BE WITH THE CHOICES WE'VE MADE TODAY?

Gaddis, John Lewis. *Surprise, Security, and the American Experience*. Cambridge, Mass.: Harvard Univ. Press, 2004. 150pp. \$18.95

John Lewis Gaddis is the Robert A. Lovell Professor of History at Yale University and one of the preeminent historians of American, particularly Cold War, security policy. *Surprise, Security, and the American Experience* is based on a series of lectures given by the author in 2002 addressing the implications for American security after the 11 September attacks. It is a succinct and masterful statement of the central national security dilemma that presently faces us.

For many, especially critics of the current administration, President Bush's post-9/11 policies in response to the threat presented by militant Islamism represent a radical and scary departure from historical U.S. policy. Many putatively are aghast at the introduction of preemptive/preventive war into the National Security Strategy adopted in September 2002 and the apparent shift to a harsh hegemonic unilateralism.

Gaddis argues that far from being a radical departure, the Bush administration's response to the attacks represents considerable continuity with American historical tradition. Twice before in

U.S. history, American assumptions about national security were shattered by surprise attack, and each time U.S. grand strategy profoundly changed as a result.

After the British attack on Washington, D.C., in 1814, John Quincy Adams as secretary of state articulated three principles to secure the American homeland against external attack: preemption, unilateralism, and hegemony. The Monroe Doctrine, proclaiming American hegemony in the Western Hemisphere, was declared unilaterally and preemptively in reaction to the Spanish empire's collapse in Latin America (though in practice it was enforced by British naval supremacy, not American power).

For over a century, the United States expanded its territory and influence through force majeure exercised against "failing states," another phenomenon by no means new in our times. Florida was ceded by Spain under pressure in 1810, Texas and the Southwest were taken from a chaotic Mexico in the mid-nineteenth century, overseas Spanish possessions

were seized in 1898 after an ostensible “terrorist” attack on USS *Maine*, and myriad lesser interventions took place in Latin America and the Caribbean. Fear of multilateral entanglement peaked with insistence on being an “associated power” during World War I, rejection of the League of Nations, and pre-World War II isolationism. America remained content with hegemony in the Western Hemisphere and unilateralism in dealings with other nations and international organizations; preemption of the dictators in the 1930s, always infeasible domestically, would have been impossible given European democracies’ appeasement policies.

Transportation revolutions from the late nineteenth century onward diminished the value of geographical separation that underpinned this strategy, as spectacularly proven by the Japanese attack on Pearl Harbor in December 1941. Obligated by necessity—the United States had insufficient power to defeat both Germany and Japan in a reasonable amount of time and at an acceptable cost—to depart radically from unilateralism, President Franklin D. Roosevelt moved quickly to establish a “Grand Alliance” with Britain and the Soviet Union.

By the end of World War II, America “was able to move in a remarkably short period of time from a strategy that had limited itself to controlling the western hemisphere to one aimed at winning a global war and managing the peace that would follow. Equally significant is the fact that FDR pulled off this expanded hegemony by scrapping rather than embracing the two other key components of Adams’ strategy, unilateralism and preemption.”

To keep allies with widely disparate war aims together, FDR sought to “embed conflicting unilateral priorities within a cooperative multilateral framework. . . . If the present war could provide the incentive to build structures and procedures that would prevent new [wars], then all would benefit.” Absent this, “there was sure to be something worse, whether in the form of a less than decisive victory against Germany and Japan, or a postwar economic collapse, or even a replay of the post-World War I retreat by the United States back into the unilateralism of the nineteenth century that had . . . contributed to the coming of World War II. The result was de facto American hegemony, but in contrast to anything John Quincy Adams could ever have imagined, *it was to arise by consent.*”

Gaddis argues that this was the radical departure in U.S. security policy, not what has happened since 11 September. Since World War II, the underlying principle vis-à-vis other nations was that “there should always be something worse than the prospect of American domination,” a condition easy to maintain during the Cold War standoff with the Soviet Union. This ensured an “asymmetry of legitimacy” between the United States and the Soviet Union that “did much to determine how the Cold War was fought and who would ultimately win it.” Preemption as policy routinely was rejected on the basis that, given the lessons of the bloody world wars, an impossibly high moral ante was needed to justify starting a war and incurring the inevitable costs for an unknown benefit, even in the face of a clear and present danger.

But what if there is no longer “something worse”? One curious question

post-Cold War is why there have been no serious efforts among other nations to build countervailing groupings to “balance” near-hegemonic U.S. global power, French urgings notwithstanding. “The reason, very likely, was the habit of self-restraint Americans had developed—because they had had to—during the Cold War, a habit they did not entirely relinquish after it ended.”

The shocking and lethal nature of the 9/11 attacks, coupled with the fact that they had been executed by a mere group of zealots, resulted in a rapid, radical change in U.S. national security strategy. Key Cold War assumptions no longer applied. The post-Cold War international environment was *not* benign; terrorists were neither deterrable nor containable like states but potentially had equivalent lethality; the international state system had declining authority; and there was no longer a security environment in which all the players knew and respected the rules.

The 2002 National Security Strategy avers that the United States will “identify and eliminate terrorists wherever they are, together with the regimes that sustain them.” Though multilateral action is preferred (“The United States will constantly strive to enlist the support of the international community”), unilateral preemption may be necessary (“We cannot let our enemies strike first.”). The United States will maintain *de facto* hegemonic power sufficient “to dissuade potential adversaries from pursuing a military build-up in hopes of surpassing, or equaling, the power of the United States.” The strategy seeks to make such implicit hegemonic power palatable by linking it to such universal principles as “No people on earth yearn to be oppressed, aspire to servitude, or

eagerly await the midnight knock of the secret police.” Lastly, the strategy and subsequent policy statements argue that terrorism (that we care about) is spawned largely by the lack of representative institutions in tyrannical regimes; thus “terrorism—and by implication the authoritarianism that breeds it—must become as obsolete as slavery, piracy, or genocide” through the spread of democracy. Gaddis finds much to respect in this strategy, particularly its intellectual coherence. However, he notes glaring flaws in its execution. The “most obvious failure has to do with the relationship between *preemption, hegemony, and consent*.” The run-up to and aftermath of the Iraqi war have raised doubts about the willingness of much of the world to consent to American hegemony if used to preempt in the absence of compellingly clear and present danger, doubts aggravated by the fact that the Bush administration “has never deployed language with anything like the care it has taken in deploying its military capabilities.” It is this lack of multilateral “consent”—and the supposed departure from widely accepted historical norms—that has animated much of the opposition to current policies both at home and abroad.

This poses a problem that will not soon disappear. As Gaddis notes, “the means we choose in this post-September 11th environment could wind up undermining the ends we seek. It is also possible, though, that the ends we seek, given the new threats we face, can be achieved only by means different from those that won World War II and the Cold War. This much at least is clear: the dilemma is a difficult one, and its resolution will largely determine the relationship

between surprise, security, and the American experience in the 21st century.”

Gaddis closes with a poignant anecdote. One of his Yale undergraduates “asked in the dark and fearful days that followed September 11th, ‘Would it be OK now for us to be patriotic?’” to which he responds, “Yes, I think it would.” This is a commentary both on the smug self-indulgence of many elites during America’s post–Cold War “vacation from history” and on the uncomfortable “disconnection in our thinking between the security to which we’ve become accustomed and the means by which we obtained it.” It is intellectually fashionable in many venues today to condemn the sometimes morally ambiguous policies that have nonetheless brought us the national security we historically have taken for granted. But as Gaddis notes: “The better approach, I think, is to acknowledge the moral ambiguity of our history. Like most other nations, we got to where we are by means that we cannot today, in their entirety, comfortably endorse. Comfort alone, however, cannot be the criterion by which a nation shapes its strategy and secures its safety. The means of confronting danger do not disqualify themselves from consideration solely on the basis of the uneasiness they produce. Before we too quickly condemn how our ancestors dealt with such problems, therefore, we might well ask ourselves two questions: What would we have done if we had been in their place then? And, even scarier, how comfortable will *our* descendants be with the choices we make today?”

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Burke, Jason. *Al-Qaeda: Casting a Shadow of Terror*. New York: I. B. Tauris, 2003. 304pp. \$24.95

As the United States enters its fifth year in the war on terrorism, too little is known about al-Qa‘ida. Though several top al-Qa‘ida operatives, like Khalid Shaikh Mohammed, are now in custody, and detainee reporting from Guantanamo Bay, Bagram Airbase, and other locations provides a historical snapshot of the pre-9/11 organization led by Usama Bin Laden, the United States still lacks the vocabulary to understand how and why terrorism threatens. This is partly due to the impact of global counterterrorist operations (the Congressional Research Services notes that three thousand suspected al-Qa‘ida members have been detained by about ninety countries), conflicting strategies within Bin Laden’s organization (global legion of militants or global inspiration), and the diversity of groups that compose contemporary depictions of al-Qa‘ida (the Egyptian al-Jihad, the Indonesian Jemaah Islamiyah, or the Kashmiri Haarakat ul-Mujahidin, to name three of the many disparate nationalist groups lumped together with al-Qa‘ida).

Jason Burke, a chief reporter for the London *Observer* who spent about four years in Pakistan and Afghanistan, argues that al-Qa‘ida (Arabic for “the base of operation” or “foundation”) is an overused term and mischaracterizes the nature of international terrorism. In contrast to the pre-9/11 view that Bin Laden is al-Qa‘ida, or the post–Operation ENDURING FREEDOM (Afghanistan) view that al-Qa‘ida is a global coalition of factions, Burke argues it is less an organization than an ideology. “Osama

bin Laden did not create it nor will his death or incarceration end it”—he has been a “peripheral player in modern Islamic militancy.” Al-Qa’ida is bigger and different from Bin Laden and his Egyptian deputy Ayman al-Zawahiri. The word denotes a purpose, not an organization.

Throughout the book, Burke weaves a personal narrative drawing from his experiences on the ground and upon a deep understanding of international terrorism. He argues, “contemporary Islamic militancy is a diverse and complex historical phenomenon.” It is driven by local political grievances, economic frustration, and government repression.

Burke’s two-year-old assertion that al-Qa’ida is more of an ideology than a group is gaining currency and is now more widely accepted within the U.S. government. The Defense Department has now defined “countering ideological support for terrorism,” or CIST, as a major component of its strategy in the global war on terrorism. In order to win this war, it is simply not enough to protect the homeland, neutralize terrorists, and eliminate terrorist safe havens. Rather, the goal is to create the conditions that prevent terrorism from becoming an international threat. As such, the Bush administration’s efforts to promote democracy and eliminate tyranny are seen as the means to establish pluralism and to provide opposition groups a nonviolent venue to express grievances. In many authoritarian countries today, there are few options for peaceful regime change. Burke’s travels and interviews led him to the conclusion that “as national Islamic movements, moderate or violent, are crushed or fail, anger is channeled into

the symbolic realm and into the international, cosmic, apocalyptic language of bin Laden and his associates.”

Burke’s work adds to the Defense Department’s effort to analyze, by deconstructing al-Qa’ida, what motivates radical terrorist groups and understand why the United States is increasingly a target. For Burke, “the world is a far more radicalized place now than it was prior to September 11th.” It is the freelance operators without obvious connection to any group who should worry us the most; without a peaceful way to resolve their perceived injustice, they resort to violence.

The distance from 9/11, counterterrorism successes with international partners, and the lack of additional attacks in the United States allow for a more thoughtful debate on why the United States is perceived negatively in the world and how local conditions spawn terrorist movements. For those who are ready for the answers, Burke’s book is a good place to start. He not only corrects conventional misunderstandings of al-Qa’ida but offers a good representation of the radicalism the United States is attempting to contain.

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Diamond, Jared. *Collapse: How Societies Choose to Fail or Succeed*. New York: Viking, 2005. 525pp. \$29.95

In his Pulitzer Prize-winning *Guns, Germs and Steel*, Jared Diamond, professor of geology at UCLA, used a blend of history, archaeology, geography, and anthropology to explain how Western civilizations rose to dominance. In *Collapse*,

Diamond uses the same approach to explore what causes some civilizations to fall into ruin while others survive or prosper. This second volume is perhaps more important in that it goes right to the heart of today's global war on terrorism and to steps that the West can take to minimize the potential for catastrophic failure, not only in the developing world but in the West itself.

Diamond contends that the collapse ("drastic decrease in human population size and/or political/economic/social complexity, over a considerable area, for an extended time") of many past societies is tied to unintended ecological suicide. He tracks this idea through a number of case studies, including the failed Polynesian cultures on Easter Island and in the southwest Pacific, the Anasazi and Mayan civilizations in the Americas, and the Viking colony on Greenland. His analysis includes lists of environmentally based causes, and decisions that societies either made or failed to make that ultimately determined their fate. He then traces these same ideas to today's world and hazards some projections into the future.

This process of ecocide is measured in eight interrelated categories: deforestation and habitat destruction; soil erosion, salinization, etc.; poor water management; overhunting; overfishing; the introduction of harmful alien species; population growth; and the increased per capita impact of people. Historically these categories have worked in tandem over time to produce collapse. This was true even in situations where conditions were not inherently catastrophic. A case in point is the demise of the Norse civilization in medieval Greenland. The Vikings' once-thriving colony died out, clinging to a maladapted

cultural heritage to the last. As the Vikings' society withered, their Inuit neighbors survived by adapting to the changing climate wrought by the mini Ice Age of the Middle Ages.

Diamond also notes the recent emergence of four new categories that add to the concern: climate change caused by humans, the buildup of toxic chemicals in the environment, energy shortages, and full human utilization of the earth's photosynthetic capacity. Diamond's discussion of these points tends to the esoteric, but several points are clear. Global warming, degradation of soils and fishing grounds through toxic poisoning, and decreasing availability of reasonably affordable energy are real problems. More importantly, they are part of a larger issue—that of the earth's capacity to sustain a growing population striving to achieve first-world status. The global, political, and social strains of billions of people aspiring to consume resources on a scale equaling that of Western societies is bound to be disruptive.

Diamond recognizes that there is more to the problem of collapse than that. No radical "tree hugger," Diamond is neither narrow-minded nor anti-business. He takes a broad look at a variety of contributing factors, including climatic change, hostile neighbors, declining support from friendly neighbors, and most importantly, a society's response to environmental degradation.

By way of illustration, Diamond opens with a case study of Montana. Once one of the wealthiest states, Montana is now among the poorest. This change flowed from multiple factors: deforestation, pollution from mining, introduction of foreign plant and fish species, loss of soil fertility and productivity, and

degradation and shortage of water. Diamond points also to a growing disparity between the super-rich flocking in to enjoy the scenery and the economically distressed local population whose means of livelihood are being eroded, and the political tensions that inevitably result.

This same confluence of problems, many coming as a result of conscious decisions on the part of leaders or citizens, is being played out across the globe. One would expect Africa, the perennial loser in such comparisons, to hold the anchor position as the continent most likely to fail. Not so. Australia heads the list, due to the legacy of aggressive importation of harmful species; government policies that promote and reward deforestation and soil ruination; destruction of aquatic habitats needed for sustainable fisheries; and other problems. Diamond opines that these conditions are not irreversible but that the continent's sustainable population is probably around eight million, somewhat less than half its current level. While one may question the exactitude of the eight-million figure, his case of overpopulation in relation to sustainability over time is well made, at least in terms of capacity for food production.

Turning to Africa, Diamond offers an instructive analysis of the Rwandan genocide. Taking a Malthusian view over the more common Hutu-versus-Tutsi source of disruption, he demonstrates how a complex mixture of poverty, fear, and opportunism, not tribal affiliation, drove the genocide. In the final analysis it all came down to land. As the population exceeded the land's ability to sustain it, the traditional fabric of Rwandan society was ripped apart. This

situation was exploited by government, tribal, and even religious leaders who turned the destitute against the merely poverty stricken. The result was the mass murder of people who had some land by those who had none.

For all the apparent doom and gloom, Diamond is cautiously optimistic about the future. Despite past failures, there are too many stories of societies successfully adapting to changing circumstances for us to despair. Technology can also contribute to success, though we are wise not to consider advances as a panacea. As to the importance of turning things around, he notes that today's terrorists may be well educated and moneyed but argues that "they still depend on a desperate society for support and toleration." He further notes, "well nourished societies, offering good job prospects . . . don't offer broad support to their fanatics." Perhaps it is this angle, if not that of survival itself, that holds the greatest interest for today's national security community.

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George, Roger Z., and Robert D. Kline, eds. *Intelligence and the National Security Strategist: Enduring Issues and Challenges*. Washington, D.C.: National Defense Univ. Press, 2004. 564pp. \$150

The current climate of reform and blame affecting the intelligence community can deflect attention from its substance and value as a contributor to policy and military operations. Lost in the shuffle of reorganization and finger-pointing are issues that will consistently remain important challenges—matters of defining and improving analysis,

educating intelligence consumers on the possibilities and constraints of intelligence, dealing with the embedded and new challenges of collection in a world dominated by previously unimagined threats, and balancing security with the need to share. It is against this backdrop that the editors, George and Kline, have collected essays by an impressive list of authors addressing many of the issues especially salient to intelligence practitioners and their consumers in this time of reflection and reform.

The anthology provides an excellent baseline for educating any analyst or consumer, new or experienced, on many of the issues consistently at play within the intelligence community. Providing content and context to the issues of requirements, collection, exploitation, analysis, and consumer use, the book provides an excellent foundation for understanding the challenges inherent in each part of the intelligence cycle. It is ideal for its intended use as a textbook for future analysts and policy makers, and is equally suited for anyone interested in how the intelligence community and its components operate.

The book is well organized, providing different perspectives on important issues. The organization allows the reader, as any great anthology does, to pick up the book and select an article or group of articles. An additional benefit of the thoughtfully considered collection is the diversity of perspectives. Essays by practitioners, theorists, and consumers each give glimpses into every role that might not otherwise be known. This range of views helps meet the stated intentions of the book—to stir thought on how the community does and should work and how it

should best serve all of its diplomatic, policy, and military consumers.

Some sections are particularly thought provoking. The essays devoted to “Intelligence and the Military,” for example, make the reader consider what kinds of options are available and should be pursued in strengthening the relationship between military and civilian intelligence practitioners and agencies: Where should the lines for collection, analysis, and dissemination be drawn or redrawn in order to exploit most effectively each group’s relative strengths? Or more basically, what are the real strengths of each outfit? What should they be?

The parts devoted to the “Challenges of Analysis” and “The Perils of Policy Support” produce valuable insights into how the different organizations are configured for their roles in the intelligence process. The “Challenges of Analysis” section describes some of the ongoing challenges of analysis and how the CIA, primarily, has developed methods to address these challenges. “The Perils of Policy Support” describes how consumers view and use intelligence. However, and though both of the last-named sections provide interesting insights into how each side currently operates, they offer little in the way of suggestions for improving the status quo. Perhaps an additional article in each of these sections, proposing or otherwise articulating several options for the way ahead, based on current legislative language or the state of debate, would be warranted in a future edition.

Deception, while a critical issue, probably gets too much play. Its treatment is a bit too founded in historical examples. In the realms of open sources, cyberspace, and network-centric adversaries, deception

issues and means of evaluation are different. While practitioners and consumers should necessarily be encouraged to learn the lessons and benefits of deception, perhaps this section should be coupled with the one devoted to open-source analysis to discuss the still unwieldy problems of the future of intelligence—reams of information from a variety of unknown sources that current “INT” equipment and methods are not ready to handle.

Overall, this book is remarkably valuable to any course dealing with the intelligence community. As it is used in classes, the outcomes of the debates it will inevitably create should themselves become anthologies for future readers.

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William J. Lahneman, ed. *Military Intervention: Cases in Context for the 21st Century*, Oxford, U.K.: Rowman & Littlefield, 2004. 224 pp. \$26.95

Most students of international affairs would agree that understanding the causes and results of military interventions is one of the more pressing security issues facing the United States in the early years of the twenty-first century. William Lahneman, program coordinator of the Center for International and Security Studies at the University of Maryland, has assembled a gifted group of analysts to examine seven instances of military intervention and, through the use of a common set of pertinent questions, attempt to reach a deeper understanding of interventions, while identifying ways to increase the chances of success in an intervention.

The eleven contributors to this volume have impressive credentials. Together, they compose a potent mix of security scholars and practitioners. In addition to Lahneman himself, of special note are William Zartman and John Steinbruner. Zartman is the Jacob Blaustein Professor of International Organizations and Conflict Resolution, and the Director of Conflict Management at the Paul H. Nitze School of Advanced International Studies at Johns Hopkins University. John Steinbruner, Director of the Center for International and Security Studies at the School of Public Policy, University of Maryland, is also the author of *The Cybernetic Theory of Decision* (Princeton Univ. Press, 2002), a seminal work in the study of decision making.

Military Intervention examines six cases of military intervention: Somalia (1992), Bosnia (1991–94), Haiti (1994), Rwanda (1994), Sierra Leone (2000), and East Timor (1999). A seventh case involving Cambodia is also provided, although in this instance, rather than focusing on a single intervention, the authors examine interventions from 1806 to 2003. Lahneman’s stated intention was that each case be examined through the lens of nine discrete questions, ranging from the nature of the intervention force to the extent to which nonmilitary aspects of the intervention were necessary and sufficient to produce a lasting peace. As analytical approaches go, this one seems well suited to support comparative analyses and cross-case lessons. Unfortunately, as is sometimes the case with a collection of essays, some authors approached this requirement with more rigor than others. The essay on Rwanda, written by Gilbert M. Khadiagala, follows the formula most closely; the chapter on

Cambodia veers the farthest from it. Editing a volume of this nature can be a thankless task, but Lahneman would have been better served by insistence that his contributors specifically answer his questions. The lack of such consistency may obscure elements the cases have in common, resulting in a missed opportunity to increase a systemic understanding of intervention.

That said, this volume is a useful addition to the body of work that, to paraphrase Alexander George, attempts to bridge the gap between the realms of academic theory and practical application. Of particular value in this regard is the first chapter of the book, written by Steinbruner and Jason Forrester. The authors confirm what many security professionals have long believed, that "civil conflicts are actually economic battles over the control of resources waged under conditions in which allocation can not be managed by legal methods or legitimate government domination."

Other chapters are less useful. First, with the possible exception of East Timor, there are deeper and more complete descriptions of the crises to be found than those in this book. Second, in some cases, the author's conclusions raise questions that beg to be answered but are left hanging. For example, David Laitin, writing on the intervention in Somalia, argues that "early, decisive action" could have been taken. Yet he acknowledges the political will for such early action was lacking and does not address how such resolve might have been created. Laitin also fails to ask how an early intervention operation in Somalia could have been terminated. Could the applicable mandate have been achieved, or would long-term stability have required the presence of

peacekeepers? Furthermore, Laitin perpetuates the idea that only eighteen U.S. servicemen were killed in the battle of Mogadishu. This number does not take into account the deaths of two soldiers assigned to the reaction force, nor does it acknowledge the Malaysian soldier who lost his life during the rescue effort. This may seem a small point, but it raises troubling questions about the depth of Laitin's research.

Steven Burg's analysis of the intervention in Bosnia reveals different shortcomings. The key point of the chapter—that states do not mount serious interventions unless national interests are involved—is widely accepted. However, Burg's chapter contains both unsupported assertions and a lack of detail concerning aspects of the case that may not be familiar to the lay reader. Still, his identification and description of seven stages of intervention is both thought provoking and useful.

As mentioned earlier, the case on Rwanda is well written and argued. Khadiagala does not insult the reader's intelligence by asserting that Western states could not have intervened in time—he clearly attributes their failure to act in Rwanda to a lack of political will. More debatable is his assertion that both sides in the conflict were counting on external actors to save them from a weak peace agreement. The evidence presented seems sketchy, especially given the Revolutionary United Front's reluctance to allow any effort at a political settlement until it had conquered the country.

The cases on Haiti, East Timor, and Sierra Leone are straightforward. Their respective conclusions include the ideas that fostering peace is conducive to long-term U.S. security, that valid political processes are central to peace, that

military intervention alone is not enough to “end a conflict whose basic cause is state collapse,” and that peacekeepers may be better served by developing successful strategies to transfer power than by focusing on “exit strategies.” These conclusions are well supported, and it is difficult to argue with any one of them.

The case of Cambodia, presented in such a different fashion, concludes that future military intervention in Cambodia is unlikely. The analysis predicts that other interventions—notably exploitative economic ones—will increase and that the forces of globalization will prove injurious to the average Khmer. Unfortunately, the chapter ends before explaining these findings in detail.

The final chapter, written by Lahneman himself, is in many ways the most valuable. Lahneman provides his own summary of the book’s cases, then identifies a variety of challenges and prescriptions associated with intervention operations. These findings range from the common-sense (“A coalition of willing states should conduct military intervention”) to the provocative (“Operations taken solely for humanitarian reasons tend to be too little and too late”).

In the final analysis, Lahneman’s book is less useful for the insights it provides into the specifically examined cases than for the questions it raises that should be answered before any intervention is ordered. This work is also an invitation to deepen the current national discussion on intervention and nation building. As Lahneman suggests, this discussion is too important to be confined to the ivory tower; the invitation should not go unanswered by the academic and security communities.

RICHARD NORTON
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Moore, Jeffrey M. *Spies for Nimitz: Joint Military Intelligence in the Pacific War*. Annapolis, Md.: Naval Institute Press, 2004, 336pp. \$29.95

Despite its title, this book is not about spies but about what is referred to in today’s parlance as “intelligence preparation of the battlefield”: a sustained process of research and analysis, based on all source collection efforts, that identifies important aspects of potential combat environments. Intelligence preparation of the battlefield provides planners and commanders with “combat intelligence”—about the terrain, weather conditions, enemy order of battle and dispositions—needed to conduct an upcoming operation. For instance, without knowledge of tidal conditions, currents, the composition and slope of a beach, or the location of underwater obstructions and mines, amphibious operations can be doomed to failure before they begin.

In this history of the performance of U.S. intelligence in the Pacific during World War II, Jeffrey Moore links the intelligence provided to planners by the Joint Intelligence Center Pacific Ocean Area (JICPOA) to the outcome of the major amphibious assaults against Japanese-occupied islands. Intelligence preparation of the battlefield, always important, was of great strategic significance in the “island hopping” campaign undertaken by the United States. Planners had to identify atolls or islets that were lightly defended by the Japanese yet possessed the anchorages, landing strips, and flat terrain that made them suitable as operating bases for the next stage in the campaign. When intelligence analysts provided accurate pictures of the battlefield, operations

generally went smoothly and U.S. casualties were light. When they underestimated enemy strength, failed to warn the assault of strange topographic conditions, or failed to anticipate shifts in enemy strategy, the outcome was a grinding attritional battle that generated high losses.

American intelligence analysts and planners knew very little about the Marshall, Mariana, or Caroline Islands. Of course, many of the atolls and islets targeted in the American march across the Pacific were extraordinarily isolated and had been inhabited mostly by Polynesians before the war. More surprisingly, planners also knew little about *American* islands that had been seized by the Japanese in the immediate aftermath of Pearl Harbor. Guamanians who had left their home island when the Japanese invaded had to be consulted about topography, road networks, and tidal conditions to support plans for the assault on Guam. The U.S. Navy had supposedly been planning operations against Japan for years; it is hard to explain why so little effort had been made to gather basic information about the Pacific islands.

In assessing JICPOA's performance, Moore identifies a perplexing trend—that U.S. intelligence actually deteriorated as the war progressed. Intelligence performed relatively well against early targets (Kwajalein, Eniwetok, Tinian, and Guam), probably because these atolls were lightly defended by the Japanese and relatively few fortifications had to be identified in the planning of shore bombardment. At the start of the war, the Japanese mostly constructed beach defenses, which were easy to spot by submarine and aerial reconnaissance. There were also some early

successes in the exploitation of Japanese material and personnel. Documents that were left behind in Guam by the Japanese Thirty-first Army headquarters were a windfall of information about Japanese defenses across the Pacific. JICPOA, however, lacked the translators and analysts needed to go through these materials quickly, a phenomenon that is referred to today as “information overload.” The tempo of the campaign was so fast, and intelligence analysis so slow, that important information often reached commanders after a battle was already joined, by which time information could yield only diminishing returns.

Worse, as the war progressed, the Japanese constructed increasingly sophisticated and well camouflaged fortifications in depth, and the time available for U.S. analysts to survey and identify island defenses decreased. Operations were executed in rapid succession, and JICPOA could no longer keep pace. Intelligence estimates decreased in quantity and accuracy just as Japanese defenses were increasing in strength and lethality. The attitudes of senior U.S. officers also changed, as American materiel superiority began to take its toll on the Japanese. Intelligence preparation of the battlefield took a backseat to maintaining the momentum of the drive across the Pacific. Commanders were more interested in bringing the overwhelming weight of U.S. naval, Marine, and army units quickly to bear against the Japanese so that the ghastly attritional campaign might end as soon as possible. As Moore notes, the island campaigns were brought to an end not by brilliant maneuver but by the virtual annihilation of Japanese garrisons.

Moore looks on the bright side of JICPOA's modest performance, but he finds only one outstanding success by its analysts during the war. Ironically, it was in support of an amphibious operation that never occurred, the planned invasion of Kyushu in the autumn of 1945. Because Japanese garrisons usually fought to the death and inflicted high casualties on attacking forces, the five hundred thousand defenders of Kyushu were capable of turning the opening phase of the attack on the home islands into a bloodbath. JICPOA's accurate estimates of the steady buildup of Japanese forces on the island led military planners to support a less costly way to end the war in the Pacific—the use of the atomic bomb against Hiroshima and Nagasaki in August 1945.

JAMES J. WIRTZ
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Lacquement, Richard A., Jr. *Shaping American Military Capabilities after the Cold War*. Westport, Conn.: Praeger, 2003. 211pp. \$67.95

Richard Lacquement provides an important narrative history and critical analysis of the Defense Department's official policy studies and reviews from the end of the Cold War through the early administration of George W. Bush. The book addresses several key themes, highlighting the scope and speed of military reform efforts and the failure, in the author's view, of defense transformation. Each chapter provides a review, discussion, and critique of the official documents on American defense policy and strategic thinking in the post-Cold War decade. The book

traces the major themes and issues in the official Defense Department policy reviews, including the 1990 Base Force, the 1993 Bottom-Up Review, the 1995 Commission on Roles and Missions of the Armed Forces, and the 1997 and 2001 Quadrennial Defense Reviews.

Lacquement is an Army field artillery officer who has served on the faculties of the U.S. Military Academy and the Naval War College. *Shaping American Military Capabilities after the Cold War*, his first book, is based on his Princeton University doctoral dissertation. It is the product of serious academic research that is informed throughout by the sincere search of a soldier-statesman for better ideas in the development of the U.S. armed forces' capabilities to serve the nation's current and future security needs.

From Les Aspin, through William Perry and William Cohen, to Donald Rumsfeld, defense secretaries and their official policy documents have addressed the Defense Department's and services' efforts at transforming the post-Cold War military. Lacquement's argument is that more change throughout the 1990s would have been better. He contrasts the influence of outsiders, mainly political defense reformers, to that of insiders, members of a mostly conservative military culture and status quo-oriented senior military leadership. Lacquement characterizes Bill Clinton's defense secretary, Les Aspin, and Connecticut senator Joseph Lieberman as champions of innovation, while portraying the Joint Chiefs of Staff chairmen Generals Colin Powell and John Shalikashvili as resistant to revolutionary new thinking on defense issues.

In tracing the evolution of these official policy documents, Lacquement comes out on the side of the glass-half-empty view of the Defense Department's attempts at reshaping post-Cold War military capabilities and service organizations and programs. He argues that major weapons programs and service budget shares overrode sound strategic thinking; that innovation champions were stymied by senior officers; and that incrementalism prevailed over transformation. Lacquement is clearly on the side of the proponents for more, better, and faster defense transformation.

Toward the end of his book, Lacquement also raises important questions regarding the nation-building capabilities of U.S. forces engaged in current complex counterinsurgency operations in Iraq and Afghanistan. For instance, he calls for additional civil affairs and psychological operations forces. In recent military history, those nation-building debates have gone back to the arguments over the appropriate roles and missions of U.S. ground forces in the war in Vietnam (Lacquement cites Andrew Krepinevich, Jr., *The Army and Vietnam* [Johns Hopkins Univ. Press, 1998], for instance). Nevertheless, his arguments lend an element of currency to those engaged in Iraq and Afghanistan policies regarding "postconflict" and stability operations. The final chapter, "Evaluation and Recommendations," introduces possibilities for engaging in some out-of-the box thinking on winning the next war by leveraging technology and the revolution in military affairs; supporting effective peace operations; and fighting the global war on terrorism while improving homeland defense. These are

significant enough research topics for a second book.

What this work does not provide is an assessment of the innovations that were attempted and in some cases executed during the Clinton and early Bush eras. My hunch is there were innovations at many levels within the Defense Department, the Joint Chiefs of Staff, the services, and the combatant commands that deserve additional attention and more research. For instance, how are we to explain the relative successes in the use of military capabilities to achieve political objectives in Balkans peacekeeping, as well as in the wars in Kosovo, Afghanistan, and Iraq? Would a more thoroughly transformed military have resulted in even fewer American and civilian casualties, and better coordinated NATO operations in Kosovo? More effective combined, joint, and special operations in Afghanistan; or a quicker completion of the conventional battles in Iraq?

Lacquement's book, carefully read, provides critical insights into the assumptions and themes in the evolution of the key policy and strategy documents in the decade following the end of the Cold War. *Shaping American Military Capabilities after the Cold War* serves to inform and ground a study of the history of major Clinton-era defense policy reviews. Gauging the size, scope, and speed of change while retaining the readiness and military capabilities to defend against current and emerging threats, of course, represents an important research agenda. For all these reasons, *Shaping American Military Capabilities after the Cold War* is an important book for students of international security and American

defense policy, and especially readers interested in defense transformation.

JOSEPH R. CERAMI
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Bell, Christopher M., and Bruce A. Elleman, eds. *Naval Mutinies of the Twentieth Century: An International Perspective*. London: Frank Cass, 2003. 288pp. \$125

Throughout this excellent collection of essays on what might rightly be called the mystique of mutiny runs a significant thread—that from centuries of laws and regulations governing naval conduct and discipline there has emerged no precise or universally accepted definition of mutiny. Ambiguity has clouded every effort to create one. The only consistent element, despite the number of crewmen involved and the growth of simple disobedience into violence, is the necessary presence of usurpation and subversion of authority.

This is evident in what thirteen writers contribute here, in an authoritative and attractive style and tone. The mutinies they have selected for study are of a character so dramatic that no matter how scholarly the approach and painstaking the research, each tale is likely to intrigue the reader. Certain selections may be familiar: the Russian battleship *Potemkin*, the mass uprising that shook the German High Seas Fleet in 1918, Invergordon, and the Port Chicago mutiny. The authors—Robert Zebroski, Michael Epkenhans of Germany's Otto von Bismarck Foundation, Christopher M. Bell, and Regina T. Akers of the Naval Historical Center—tackle their subjects with fresh appraisal and zeal. The bloody *Potemkin* revolt led to the fall of

the Romanovs. The mutinous German seamen sabotaged their government's war effort. The Invergordon mutiny threw Great Britain off the gold standard. Thanks mostly to the NAACP's brilliant young lawyer, Thurgood Marshall, the Port Chicago episode not only struck a blow at racial discrimination but highlighted the endless debate of what constitutes a mutiny. Also, it should not be forgotten that President Clinton's pardon of Freddie Meeks in 1999 still leaves the names of forty-nine African-Americans on record as the only convicted mutineers in U.S. naval history.

The lesser known mutinies are dealt with by equally qualified experts with comparable skill and revelation. In 1910 the fury of Brazilian sailors against brutal employment of the lash reflected that country's discontent. After winning minor reforms from the ruling class, the men of the dreadnoughts *Minas Geraes* and *Sao Paulo* continued to show the Brazilian flag above subequatorial waters, maintaining their country's reputation as South America's leading naval power. The mutiny in the Adriatic Sea aboard the Austro-Hungarian armored cruisers *Sankt George* and *Kaiser Karl VI* in February 1918 is said to have helped bring down the Hapsburg monarchy. Yet as the author of "The Cattaro Mutiny, 1918," Paul G. Halpern of Florida State University, asserts, the revolt lasted only two days. Its causes were traceable to bad food, boredom, and plain war-weariness. Also mutinous, after four years of war with Germany, were French sailors when ordered into war against Russian Bolsheviks. While this event is the principal focus of the essay by French history professor Philippe Masson, notice

might have been taken of concurrent mutinous outbreaks prompted by the same disinclination to fight Russians, after fighting Germans, onboard British warships off Archangel and among American troops in the same region.

Homesickness and wartime restrictions were among the reasons why Australian tars defied their officers in 1919. The Chilean navy's revolt had its roots, as had that of the men of Invergordon, in the world economic depression, but the Chilean navy's revolt is notable as the first naval mutiny crushed by air bombardment. Indian sailors in the waning years of the British Raj staged lower-deck protests against their officers; the Canadian fleet developed "a tradition of mutiny" in the 1930s; and the Chongqing mutiny off Manchuria in 1949 "played a pivotal role in the . . . founding of the People's Republic of China."

Each story is briskly told, thoroughly detailed, and accompanied by comprehensive source data. Perhaps fortunately for riddle lovers, the question persists—what is a mutiny? Many of the Port Chicago fifty awaiting trial were bewildered, believing that a mutiny involved a crew overthrowing its officers and taking command of the ship. High-level brass can be just as confused. At a Senate Armed Services Committee hearing following the Vietnam-era disturbances on the U.S. aircraft carriers *Constellation* and *Kitty Hawk*, the chairman asked Admiral Elmo Zumwalt, then Chief of Naval Operations, to define mutiny. Zumwalt passed that one on to his lawyer. The chairman wondered aloud if the *Caine* mutiny of Herman Wouk's novel, though fictional, was not the real thing; the CNO suggested that what happened on the *Bounty* was a genuine mutiny.

This book mentions these troubles on the American flattops only in passing. Were all the episodes it covers truly mutinies? Let the question rest. This is a fine book, eminently readable, and as definitive as any work can claim to be on the still mysterious matter of mutiny.

LEONARD F. GUTTRIDGE
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Brown, Stephen R. *Scurvy: How a Surgeon, a Mariner, and a Gentleman Solved the Greatest Medical Mystery of the Age of Sail*. Markham, Ont.: Thomas Allen, 2003. 254pp. \$23.95

The conquest of scurvy played as great a role as any naval battle in the history of England's domination of the world during the Age of Sail. Today we understand that scurvy is a condition caused by dietary deficiency. The typical menu for a sailor in the eighteenth century consisted of biscuits, salt beef, salt pork, dried fish, butter, cheese, peas, and beer—hardly sources of vitamin C. According to the 1763 annual register tabulation of casualties among British sailors in the Seven Years' War with France, of 184,999 men, 133,708 died from disease, primarily scurvy, while only 1,512 were killed in action. Such numbers are hard to comprehend today.

Brown implies that America won its independence because the ravages of this disease prevented the British fleet from maintaining an effective blockade. Only a few years later, having conquered scurvy, the same navy thwarted Napoleon from mounting an invasion force and sustained a blockade preventing the French and Spanish from consolidating their ships into an effective fleet.

This book is a definitive history of scurvy. It had been known among the ancients, but its effects became truly dreadful during the Age of Sail, when ships would be at sea for months on end. The beginnings of a concerted search for its cure might be ascribed to the ill-fated circumnavigation of the world by George Anson in the years 1740–44. Five warships and one sloop began the journey, but only one ship returned. Scurvy had felled so many men that ships had had to be scuttled and abandoned for lack of sufficient crews. When Anson became First Lord of the Admiralty, he encouraged scurvy research and made changes to shipboard hygiene.

Three names stand out in the search for a cure: James Lind, a surgeon, performed controlled experiments; James Cook, a mariner, managed to circle the globe without his men's succumbing to scurvy; and Gilbert Bane, a gentleman, was able to overcome tradition-bound prejudices and persuade the Admiralty to issue daily rations of lemon juice, which finally eliminated the dreaded disease.

Scurvy is important reading for today's naval officer, not only because it tells a historically fascinating tale but also because it examines how progress was made by "thinking out of the box" and going beyond the assumptions of the times. As early as the early seventeenth century open minds discovered a cure but did not fully understand why it relieved the effects of the disease.

"Common sense" at that time made the approach seem implausible, and the cure was lost. Scurvy was eventually defeated, but its cause was not fully understood until the twentieth century. The Nobel laureate Albert Szent-Gyorgyi isolated ascorbic acid in 1932, and today we are able to buy inexpensive megadoses of vitamin C.

The story told by Stephen Brown is fascinating in the way it ties together seemingly disconnected events to show that cause and effect are not always linear. Vasco de Gama recorded the first naval outbreak of scurvy during his 1497 voyage around the Cape of Good Hope. Iroquois Indians helped Jacques Cartier's crew survive scurvy while wintering on the banks of the St. Lawrence in 1534. The East India Company defeated scurvy in the early 1600s, but, as we have noted, the cure was lost. Scurvy developed during the Irish potato famine of 1847 and appeared among the Forty-Niners of the California Gold Rush.

Scurvy: How a Surgeon, a Mariner, and a Gentleman Solved the Greatest Medical Mystery of the Age of Sail will fascinate the history buff, the health-conscious reader, and anyone who can appreciate the difficulty we as humans have in accepting empirical evidence when it appears to contradict the conventional wisdom. At the very least, the reader will find interesting the story of how sailors endured the Age of Sail.

XAVIER K. MARUYAMA
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FROM THE EDITORS

VICE ADMIRAL JAMES B. STOCKDALE, USN (1923–2005)

The editors have their own reasons for regret at the passing of Vice Admiral James B. Stockdale (whose eulogy is reprinted on pages 3–4)—the admiral was a member of the *Naval War College Review* Advisory Board and a former president of the Naval War College. A 1947 graduate of the U.S. Naval Academy, he served first in destroyers, later as a naval aviator. In 1965 he was shot down over North Vietnam, becoming the senior U.S. naval prisoner of war until his release in 1973. Admiral Stockdale was the president of The Citadel in Charleston, South Carolina, joined the Hoover Institution as a senior research fellow, and briefly entered national politics after retirement from naval service in 1979. Vice Admiral Stockdale was a holder of the Congressional Medal of Honor.

NEWPORT PAPER 23

The twenty-third of our Newport Papers monograph series, *The Atlantic Crises: Britain, Europe, and Parting from the United States*, by William Hopkinson, is available from the editorial office and online. It is a commonsensical and timely overview of the origins and evolution of the transatlantic relationship since the Second World War, paying particular attention to the U.S. relationship with Great Britain and its impact upon intra-European debates. Mr. Hopkinson argues that the current breach may be far more serious than those of the past. He is especially well placed to comment wisely on transatlantic relations, having served in the British Ministry of Defence navigating the shoals between Great Britain, the United States, and the Continent. The Naval War College Press is pleased to be able to publish this important look at the past, present, and future of one of the most important strategic issues facing the United States.

2004 NAVAL WAR COLLEGE REVIEW PRIZE WINNERS

The President of the Naval War College has awarded cash prizes to the winners, nominated by faculty committees, of this year's Hugh G. Nott Prize and Edward S. Miller History Prize, for articles appearing in 2004.

The Hugh G. Nott Prize, established in the early 1980s, is given to the authors of the year's best articles (less those considered for the Miller Prize). The winner this year is Richard A. Lacquement, for "The Casualty-Aversion Myth," Winter

2004 (\$1,000). The President also awarded prizes (\$330) to three runners-up: Susan D. Fink, for “The Trouble with Mixed Motives: Debating the Political, Legal, and Moral Dimensions of Intervention,” Summer/Autumn 2004; Timothy D. Miller and Jeffrey A. Larsen, for “Dealing with Russian Tactical Nuclear Weapons: Cash for Kilotons,” Spring 2004; and Ian Story and You Ji, for “China’s Aircraft Carrier Ambitions: Seeking Truth from Rumors,” Winter 2004.

The Miller Prize (\$500) was founded in 1992 by the historian Edward S. Miller for the author of the year’s best historical article. This year’s winners are Lyle J. Goldstein and Yuri M. Zhukov, for “A Tale of Two Fleets: A Russian Perspective on the 1973 Naval Standoff in the Mediterranean,” Spring 2004.